





First Potato Summit 2024: Comprehensive Report

Organized by:

Nepal-India Chamber of Commerce & Industry (NICCI)

In association with:

Ministry of Agriculture and Livestock Development & FAO Nepal Powered by:

Agriculture Development Bank Limited and Business Organizations



International Potato Day, 30th May 2024, Kathmandu, Nepal

Foreword

The First Potato Summit 2024 marks a significant step towards strengthening Nepal's agricultural landscape, particularly in the potato sector, which is a vital contributor to food security and economic development. This summit provided a platform for policymakers, researchers, industry leaders, and farmers to discuss challenges, opportunities, and innovations in potato farming, processing, and commercialization.

On behalf of the Nepal-India Chamber of Commerce and Industry (NICCI), I extend my sincere gratitude to the Ministry of Agriculture and Livestock Development (MoALD) and the Food and Agriculture Organization (FAO) Nepal for their invaluable partnership in organizing this event. Special thanks to the Agricultural Development Bank Limited (ADBL) for their title sponsorship and to all other esteemed sponsors for their unwavering support.

The insightful discussions and policy recommendations from this summit will pave the way for a more sustainable and productive potato sector in Nepal. I appreciate the collective efforts of all stakeholders and look forward to continued collaboration in achieving our shared vision.

Sunil KC
President
Nepal-India Chamber of Commerce & Industry (NICCI)

Preface

The First Potato Summit 2024 was a landmark initiative, uniting key stakeholders from Nepal's potato industry to discuss sustainable farming, market trends, value addition, and policy frameworks. The summit fostered knowledge exchange, innovation, and collaboration, reinforcing the commitment of various individuals and organizations from the eastern to the far western regions, as well as entrepreneurs from Mustang to the Terai region of Nepal, along with potato experts from India, to strengthen Nepal's agricultural sector.

The First Potato Summit 2024 concluded with a renewed commitment to advancing Nepal's potato industry. This event stands as a milestone in promoting agricultural sustainability, improving productivity, and fostering collaboration among industry stakeholders.

I extend my sincere appreciation to the Ministry of Agriculture and Livestock Development (MoALD) and Dr. Binod Sah, Assistant Representative of FAO Nepal, for their partnership and technical expertise. My gratitude also goes to the Agricultural Development Bank Limited (ADBL) for their title sponsorship and all esteemed sponsors for their generous support.

A special thanks to Mrs. Januka Pandit, Joint Secretary, MoALD, for her coordination on the government side, and to Mrs. Sushama Sharma, Convener of the M/SME Committee at NICCI, for her leadership in organizing this summit. I deeply appreciate the efforts of the NICCI team, including Mr. Marshal Rathour, Deputy Director, Mr. Nimesh Nepal, Head of Accounts, and the dedicated team at FAO Nepal. I also extend my gratitude to our contributors, including Surya Nepal Pvt. Ltd., Nabil Bank Ltd., NMB Bank Ltd., Salt Trading Corporation Ltd., First Choice Food Pvt. Ltd., and CG Foods Nepal Pvt. Ltd.

Special recognition goes to Agro-Entrepreneur Mr. Dambar Khanal, Co-Convener of the M/SME Committee at NICCI, and Mr. Sarbesh Mainali of 3S Foundation for their technical contributions from conception to execution.

We are proud to present this comprehensive report, which documents the outcomes of the summit, including key insights from panel discussions and concluding sessions. This report documents key insights from panel discussions and concluding sessions, addressing critical challenges such as crop production, storage techniques, pest management, and value addition while exploring ways to attract youth into agriculture. The summit facilitated meaningful discussions to develop solutions for sustainable potato farming in Nepal. I would like to thank Ms. Khushi Shrestha, Trainee at NICCI for transcribing and translating the entire audio-video for this comprehensive report.

Recognizing the summit's success, NICCI is committed to hosting the Potato Summit annually on May 30th, ensuring continued dialogue and innovation for Nepal's potato sector. We believe this initiative will remain a driving force for policy enhancement and sustainable agricultural development.

Keshab Man Singh Director General Nepal-India Chamber of Commerce & Industry (NICCI)

Acknowledgment

The success of the First Potato Summit 2024 is the result of the collective efforts of numerous individuals and organizations dedicated to advancing Nepal's potato sector. I extend my deepest gratitude to the Ministry of Agriculture and Livestock Development (MoALD) and FAO Nepal for their invaluable partnership and unwavering support. My special appreciation goes to the Agricultural Development Bank Limited (ADBL) for their title sponsorship and to all esteemed sponsors for their generous contributions. A heartfelt thank you to Mrs. Januka Pandit, Joint Secretary of MoALD, whose coordination with the government and experts played a crucial role in ensuring the summit's success. I also acknowledge Mr. Keshab Man Singh, Director General of NICCI, for his leadership and tireless efforts in executing the event and developing this comprehensive report.

My sincere appreciation goes to Dr. Binod Sah, Assistant Representative of FAO Nepal and his dedicated team, my fellow committee members, and the dedicated teams at NICCI, including Dy. Director Mr. Marshal Rathour and Accounts Head Mr. Nimesh Nepal, for their invaluable contributions in planning and executing this summit. I also extend my gratitude to all contributors, including Surya Nepal Pvt. Ltd., Nabil Bank Ltd., NMB Bank Ltd., Salt Trading Corporation Ltd., First Choice Food Pvt. Ltd., and CG Foods Nepal Pvt. Ltd.

I would also like to express my deep appreciation to Dr. Deepak Kumar Kharal, Secretary of MoALD, and our Chief Guest, Hon. Minister Ms. Jwala Kumari Sah, for their leadership and inspiring commitment to Nepal's agricultural sector. My gratitude extends to Mr. Suman Sekhar, First Secretary (Commerce) at the Embassy of India, Ms. Shreejana Rana, President of NICCI, and other distinguished dignitaries who supported this summit.

A special thank you to Ms. Monika Thotova, Senior Agro-Economist from FAO, Mr. Ken Shimizu, Country Representative of FAO for Bhutan and Nepal, and the participating farmers from Mustang, Panchkhal, Kapilvastu, and Parasi, whose invaluable insights enriched our discussions.

Special recognition is due to Mr. Dambar Khanal, Co-Convener of the M/SME Committee at NICCI, and Mr. Sarbesh Mainali of 3S Foundation, for their instrumental technical contributions. Thanks also to the Federation of Nepal Women Entrepreneurs Association (WEAN) for their active participation.

Finally, I extend my heartfelt appreciation to the IP President of NICCI Mrs. Shreejana Rana for her encouragement in bringing this summit to life.

The First Potato Summit 2024 reaffirmed our commitment to making Nepal self-sufficient in potato production. I look forward to the Second Potato Summit 2025 on May 30, 2025 and continued collaboration in fostering innovation and growth in Nepal's agricultural sector.

Sushama Sharma
Convener, M/SME Committee
Nepal-India Chamber of Commerce & Industry (NICCI)

POTATO SUMMIT



PATHWAY TO SELF SUFFICIENCY

Date: 30th May 2024 / 17th Jestha 2081

Day: Thursday

Venue: Alice Receptions, Gairidhara, Kathmandu, Nepal

PROGRAM FLOW SHEET

ESTIMATE TIME	ACTIVITIES						
8:30am - 9:30am	Registration & Breakfast						
Inaugural Session							
9:30am - 9:50am	Welcome Remarks from NICCI President Mrs. Shreejana Rana						
Keynote Papers							
9:50am - 10:10am	Neighboring Country's Experience (India) by Mr. NK Jha, CEO of Technico Agri- Science Limited, India						
10:10am - 10:30am	Global Potato Scenario (FAO) Ms. Monika Thotova from the Food and Agriculture Organization (FAO).						
Guest Remarks							
10:30am - 10:40am	Remarks from Mr. Ken Shimizu, the Country Representative of FAO for Bhutan and Nepal						
10:40am - 11:10am	Inaugural Remarks by by Honorable Minister Ms. Jwala Kumari Sah						
11:00am - 11:10am	Vote of thanks by Coordinator of the Potato Summit 2024, Mrs. Sushama Sharm						
11:10am - 11:25am	Concluding Remarks from Chairperson of the Inaugural Session, MOALD Secretary Mr. Deepak Kumar Kharal						
11:25am - 11:30am	Presentation of Token of Love						
	11:30am – 11:40am: Tea Break & Showcase						
Technical Sessions							
1. SEED & TABLE POTATO VALUE CHAIN							
11:40am - 11:45am	Moderator Creating Scenario						
11:45am - 12:35pm	Panel Discussion						
12:35pm -12:45pm	Q & A						

	12:45pm-1:45pm – Lunch Break & Showcase							
2. PROCESSING & V	ALUE ADDITIONAL OF POTATO							
1:45pm- 1:50pm	Moderator Creating Scenario							
1:50pm - 2:40pm	Panel Discussion							
2:40pm- 2:50pm	Q & A							
3. ENABLING ENVI	RONMENT FOR PRIVATE SECTOR ENGAGEMENT IN POTATO VALUE CHAIN							
2:50pm - 2:55pm	Moderator Creating Scenario							
2:55pm- 3:45pm	Panel Discussion							
3:45pm - 3:55pm	Q & A							
	3:55pm - 4:10pm: Tea Break & Showcase							
	Closing Session							
4.10pm -4.30 p.m.	Potato Current Status, Gaps and Way Forward - By Mrs. Januka Pandit, Joint Secretary, Ministry of Agriculture and Livestock Development							
4.30pm- 5.00 pm	Private Sector Engagement on Value Chain - Mr. Shyam Dhakal, Director, First Choice Foods Pvt. Ltd.							
5.00 pm- 5.20pm	Hand-in-Hand Initiative by FAO: A Collaborative Approach to Agricultural Investment – Mr. Shankar Sapkota, FAO Nepal							
5.20pm- 5.40pm	Recommendation of the Summit -Declaration by Mrs. Januka Pandit, Joint Secretary, Ministry of Agriculture and Livestock Development, and member of the organizing committee							
5.40pm – 6.00pm	Remarks by Mr. Umesh Shrestha, Special Guest of the Closing Session, and Former Minister of State for Education & Agriculture Entrepreneur							
6:00pm - 6:20pm	Closing Remark from Dr. Rajendra Prasad Mishra, the Chief Guest of the Closing Session, Secretary, (MoALD)							
6.20pm- 6.40pm	Final Closing Remarks by Dr. Hari Bahadur KC, Chairperson of the Closing Session and Director, Department of Agriculture							
	6.40 pm onwards Networking, Showcase & Dinner							

Executive Summary: First Potato Summit 2024

The First Potato Summit 2024 was a landmark event aimed at strengthening Nepal's potato industry through knowledge-sharing, technological innovation, and policy dialogue. Organized in collaboration with key stakeholders, the summit provided a platform for government agencies, private sector leaders, researchers, and farmers to explore solutions for enhancing productivity, market access, and sustainability. Discussions centered on challenges and opportunities in seed systems, mechanization, processing, and export potential, laying the foundation for a more resilient potato sector.

1. Key Highlights

- The First Potato Summit 2024 was successfully organized on May 30, 2024, in Kathmandu by the Ministry of Agriculture and Livestock Development (MoALD), Nepal-India Chamber of Commerce and Industry (NICCI), and FAO Nepal.
- The summit aimed to facilitate knowledge exchange, promote innovation, and address challenges in Nepal's potato industry.
- Chief Guest: Hon. Minister for Agriculture and Livestock Development, Ms. Jwala Kumari Sah.
- Participation from policymakers, researchers, industry leaders, agribusiness professionals, and international experts.
- Three keynote addresses and three technical panel discussions focused on potato value chains, processing, market expansion, and industry challenges.

2. Summit Declaration

- 1. Recognition of potatoes as a strategic crop for food security and economic development.
- 2. Commitment to self-sufficiency in potato production and reducing dependency on imports.
- 3. Support for private sector engagement in the potato value chain through investment-friendly policies.
- 4. Strengthening of seed systems, quality control, and branding of Nepalese potatoes.
- 5. Promotion of cold storage facilities, mechanization, and financial support for farmers and agribusinesses.

3. Key Recommendations

3.1 Policy & Institutional Framework

- Formulation of a 20-year strategic plan for Nepal's potato sector.
- Establishment of a minimum support price for seed and table potatoes.
- Integration of Potato Zones and Super Zones into Nepal's agricultural modernization plans.
- Strengthened public-private partnerships (PPP) in seed production, storage, and processing industries.

3.2 Industry & Market Development

- Branding and Geographical Indication (GI) certification for high-altitude Nepalese potatoes.
- Development of contract farming models to ensure market stability and fair pricing.

- Establishment of export-oriented processing industries for chips, starch, and other potato-based products.
- Promotion of agro-tourism linked to potato cultivation.

3.3 Research & Innovation

- Increased investment in high-yield, disease-resistant potato varieties.
- Development of mechanized farming techniques and training for farmers.
- Strengthening research institutions like NARC and NPRC for better seed production.
- Support for innovations in potato processing and value addition.

3.4 Infrastructure & Financial Support

- Expansion of cold storage and warehousing facilities to minimize post-harvest losses.
- Soft loans and financial incentives for potato processors and exporters.
- Integration of ICT and digital platforms to disseminate real-time information to farmers.
- Strengthening rural cooperatives and farmer groups for collective bargaining.

4. Event Outcomes

- Establishment of the Potato Summit as an annual event to monitor progress and address emerging challenges.
- Renewed commitment from FAO, MoALD, and NICCI to mobilize technical and financial resources for the sector.
- Enhanced stakeholder engagement between government agencies, private sector investors, and research institutions.
- Strengthened focus on youth engagement in potato farming through education and training.

5. Achievements in Nepal's Potato Sector

Since the successful organization of the First Potato Summit 2024, Nepal's potato industry has witnessed significant progress. Key developments include increased private investment, expanded cultivation areas, and enhanced processing capabilities.

5.1 Expansion of Industrial Potato Production

UB Holding Pvt. Ltd. has entered the potato sector, initiating large-scale industrial potato collection and production. R & D Innovative Solution Pvt. Ltd., in collaboration with financial institutions, introduced the Kishan Card and Technical Card for farmers, enhancing financial access and technical support. Additionally, Green Forestry & Cold Storage Pvt. Ltd. and R & D Innovative Solution Pvt. Ltd. have launched a feasibility study on contract potato farming in Madhesh Pradesh to strengthen organized production and supply chains.

5.2 Notable Production and Market Dynamics In FY 2023/24, potato cultivation expanded significantly:

- Bara district saw production across 7,440 hectares, yielding 118,296 tonnes, valued at Rs. 4.73 billion, with fluctuating market prices between Rs. 40-50 per kilogram.
- Taplejung produced 55,279 tonnes from 4,270 hectares, with a total market value of Rs. 2.5 billion.
- Market price variations included a 4.08% increase in Mude potatoes in July 2024 due to weatherrelated supply constraints.
- **5.3 Government Initiatives Supporting Commercialization** The government has allocated significant resources to boost potato production:
 - Rs. 15 million was allocated for commercial farming across 110 hectares in Parbat district.
 - The Potato Zone Development Program in Mustang designated 500 hectares for cultivation, with Rs. 12.7 million in funding, including 85% subsidies for infrastructure and 50% subsidies for inputs.
- **5.4 Advancements in Seed Production and Processing** Kalapas Biotech Pvt. Ltd. has pioneered the production of genetically pure, disease-free potato seeds using tissue culture techniques, helping reduce Nepal's Rs. 3.11 billion annual potato seed imports. Meanwhile, First Choice Foods Pvt. Ltd. has established an automatic potato processing plant in Rupandehi with an investment of Rs. 2 billion. This facility is set to:
 - Process 200 kg of potatoes per hour, providing employment to over 150 individuals.
 - Reduce Nepal's annual potato import expenditure by Rs. 6 billion.
 - Register three processing potato varieties, with two additional ones under experimentation.
 - Expand production areas to new districts.
 - Begin commercial French fry production, now available in major retail chains such as Bhatbhateni and Saleways.
 - Collaborate with 4,500 farmers across 12 districts for dedicated potato cultivation.

6. Conclusion & Way Forward

The First Potato Summit 2024 has set the stage for transformative developments in Nepal's potato industry. The expansion of commercial farming, contract-based production, and improved seed technology are driving self-sufficiency and resilience. Moving forward, sustained collaboration between the government, private sector, and farmers will be essential to maintaining momentum and unlocking Nepal's full potential in potato cultivation and processing.

7. Next Steps:

- Annual Potato Summit on May 30 to track progress and implement policy recommendations.
- Development of a detailed roadmap for potato sector growth.
- Strengthening engagement with regional and international stakeholders to attract investments and technology transfers.
- Establishing a multi-stakeholder Potato Council to oversee policy execution and industry development.

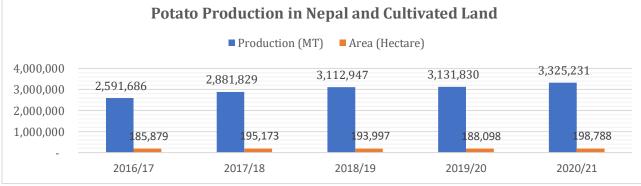
Potato Summit, 2024

Potato Literature in Nepal

The potato is the third most important food crop in the world after rice and wheat in terms of human consumption, reaching the kitchens of poor to reach. More than a billion people worldwide eat potato. Potato is vegetatively propagated, meaning that a new plant can be grown from a potato or piece of potato, called a "seed". The potato industry in Nepal has undergone significant development over the years, emerging as one of the crucial components of the country's agricultural sector. Historically, potatoes were introduced to Nepal in the early 20th century, primarily for experimental purposes. However, due to favorable agro-climatic conditions and increasing demand, potato cultivation gradually gained momentum. Today, Nepal stands as a notable producer of potatoes in the South Asian region. The industry has witnessed advancements in cultivation practices, with farmers adopting modern techniques and improved varieties to enhance productivity. Moreover, governmental initiatives and support programs have played a pivotal role in promoting potato farming, providing farmers with access to quality seeds, training, and infrastructure. Despite challenges such as pest infestations, limited access to markets, and fluctuating prices, the potato industry continues to thrive, contributing significantly to food security, rural livelihoods, and economic growth in Nepal. With ongoing efforts to address challenges and capitalize on opportunities, the future of the potato industry in Nepal appears promising, poised for further expansion and sustainability.

Over the past five years from FY 2016/17 to 2020/21, both potato production and the area of potato farming have witnessed growth, as reported by the Ministry of Agriculture and Livestock Development. The ministry's data reveals an increase of 12900 hectares and a rise of approximately 733,500 MT metric tons in production during this period. In the fiscal year 2020/21, Nepal yielded a total of 33,25,231 metric tons of potatoes from 198,788 hectares of land.





Source: Statistical Information on Nepalese Agriculture 277/78 (2020/21) published by MoALD

National Potato Vegetable and Spice Crop Development Center, notes governmental efforts to establish potato super-zones across various locations in Nepal. He attributes the production surge to farmers adopting advanced varieties over traditional seeds, highlighting the storage longevity of potatoes as a factor driving farmer interest.

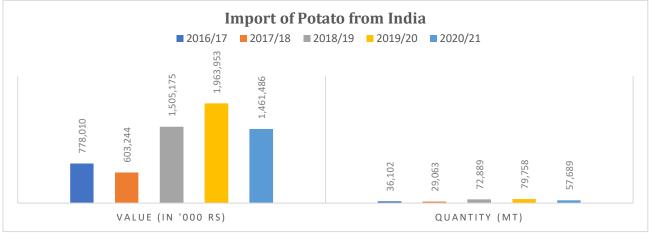
Import of Potato from India to Nepal from 2016/17/2020/21									
Year (BS)	2073/74	2074/75	2075/76	2076/77	2077/78				
Year (AD)	2016/17	2017/18	2018/19	2019/20	2020/21				
Value (In '000 Rs)	778,010	603,244	1,505,175	1,963,953	1,461,486				
Quantity (MT)	36,102	29063	72889	79758	57689				
value (In '000 Rs)/MT	22	21	21	25	25				

Source: Nepal Foreign Trade Statistics, Department of Custom, Government of Nepal (HS Code 07101000)

Despite domestic production gains, the import of potatoes from India persists, with government data indicating an annual import value exceeding NRs. 1.46 billion in 2020/21. However, import of production of potato from India or abroad to Nepal during the review period remained minimal in comparison to its production in Nepal.

Production in Nepal vs Import of Potato from India to Nepal from 2016/17/2020/21								
Year (BS)	2073/74	2074/75	2075/76	2076/77	2077/78			
Year (AD)	2016/17	2017/18	2018/19	2019/20	2020/21			
Production (MT)	2,591,686	2,881,829	3,112,947	3,131,830	3,325,231			
Quantity (MT)	36,102	29,063	72,889	79,758	57,689			
% of Import vs production in Nepal	1%	1%	2%	3%	2%			

Source: Statistical Information on Nepalese Agriculture 277/78 (2020/21) published by Ministry of Agriculture & Livestock Development and Department of Custom, Government of Nepal (HS Code 07101000)



Source: Nepal Foreign Trade Statistics, Department of Custom, Government of Nepal (HS Code 07101000)

First Potato Summit 2024 in Nepal

Objective

The First Potato Summit aimed to facilitate knowledge exchange, promote innovation, and address challenges faced by stakeholders involved in the potato industry in Nepal. Through insightful discussions, presentations, workshops, and networking opportunities, the Summit also aimed to foster collaboration and enhance the sustainability and competitiveness of the potato sector.

Summit Themes:

- 1. Sustainable potato cultivation practices.
- 2. Technological advancements in potato farming and processing.
- 3. Market trends and opportunities for potato growers and traders.
- 4. Challenges and solutions for pest and disease management.
- 5. Value addition and diversification in the potato value chain.
- 6. Policy and regulatory frameworks impacting the potato sector.

Key Activities:

- 1. Keynote presentations by renowned experts in the field.
- 2. Panel discussions involving industry leaders, policymakers, and researchers.
- 3. Technical sessions and workshops focusing on practical solutions and best practices.
- 4. Poster presentations and exhibitions showcasing innovative products, services, and research findings.
- 5. Networking sessions to facilitate collaboration and partnerships among participants.

Targeted Audience:

- 1. Potato farmers and producers
- 2. Agribusiness professionals and entrepreneurs
- 3. Researchers and academicians
- 4. Government officials and policymakers
- 5. NGOs and development agencies
- 6. Suppliers of agricultural inputs and machinery
- 7. Financial institutions and investors

About Organizers and Major Supporter of Potato Summit, 2024

1. About the Ministry of Agriculture and Livestock Development (MoALD)- Organizer

The Ministry of Agriculture and Livestock Development (MoALD) is a pivotal government body in Nepal responsible for formulating and implementing policies, programs, and projects related to agriculture, livestock, and overall rural development. As a sector that supports the livelihoods of the majority of Nepal's population and significantly contributes to the national economy, the ministry plays a critical role in ensuring food security, promoting sustainable agricultural practices, and enhancing the productivity and competitiveness of agricultural and livestock products. MoALD is also responsible for fostering innovation, modernizing farming techniques, and supporting the welfare of farmers and agroentrepreneurs through research, capacity building, and market development initiatives.

2. Nepal-India Chamber of Commerce and Industry (NICCI) - Organizer

Established in 1994 as a non-profit social organization, the Nepal-India Chamber of Commerce and Industry (NICCI) serves as a leading platform for Nepali industrialists, entrepreneurs, and businesses engaged in fostering economic cooperation between Nepal and India. NICCI represents a diverse network of enterprises, including Indian joint ventures in Nepal, and plays a pivotal role in advancing bilateral trade, investment, tourism, agriculture, energy generation, transmission, and power trade as well as other related economic agenda between the two neighboring nations.

With a strong commitment to promoting joint venture investments and strengthening economic relations, NICCI actively engages in initiatives that bolster collaboration and innovation across sectors. The organization remains dedicated to safeguarding the interests of the business community while leveraging the longstanding bilateral ties between Nepal and India. Through dynamic events, policy advocacy, and strategic partnerships, NICCI continues to serve as a catalyst for sustainable economic growth and regional cooperation, reaffirming its pivotal role in Nepal's socio-economic development.

3. About FAO in Nepal - Financial and Technical supporter

Nepal became a member of the Food and Agriculture Organization of the United Nations (FAO) on November 21, 1951, marking the beginning of a longstanding partnership dedicated to enhancing agricultural development and rural livelihoods. Over the decades, FAO has played a crucial role in supporting the Government of Nepal in formulating and implementing strategic initiatives aimed at modernizing the agricultural sector and ensuring food security.

FAO's assistance spans a wide range of activities, including capacity building, institutional development, and technical expertise in agriculture, livestock, forestry, and fisheries. It has been instrumental in guiding Nepal's agricultural transformation through significant frameworks such as the Agriculture Perspective Plan (1995–2015) and continues to collaborate on long-term strategies, including the Agriculture Development Strategy and the National Food and Nutrition Security Plan, both envisioned for a 20-year period.

Through targeted interventions and partnerships with national and international stakeholders, FAO remains committed to addressing the challenges posed by climate change, food insecurity, and the evolving agricultural landscape. Its contributions have been pivotal in fostering sustainable agricultural practices, enhancing rural livelihoods, and promoting a resilient and inclusive agricultural system in Nepal.

4. Agricultural Development Bank Limited (ADBL), Nepal - Major sponsor

Agricultural Development Bank Limited (ADBL), Nepal, established in 1968, stands as a pioneering financial institution dedicated to the development of Nepal's agricultural sector and rural economy. Initially founded to provide financial support to agriculture-based activities, the bank has evolved into a full-fledged commercial bank offering a comprehensive range of financial products and services. Its extensive network of branches across the country makes ADBL a vital pillar for rural development and agricultural growth.

Committed to fostering innovation and modernization in the agriculture and agribusiness sectors, ADBL supports farmers, cooperatives, and entrepreneurs through tailored financial solutions, capacity-building programs, and technology-driven services. The bank plays a crucial role in strengthening Nepal's agricultural economy by financing initiatives in crop production, livestock development, agri-processing, and infrastructure projects. As a trusted partner in Nepal's development journey, ADBL continues to contribute to food security, employment generation, and rural prosperity, making it a key stakeholder in events like the Potato Summit aimed at advancing the nation's agricultural landscape.

5. Supporters and Sponsors

NICCI extends its sincere appreciation to FAO Nepal and the Agriculture Development Bank Limited, Nepal, for their invaluable support. We also acknowledge the generous contributions from Surya Nepal Pvt. Ltd., Nabil Bank Ltd., NMB Bank Ltd., Salt Trading Corporation Ltd., First Choice Food Pvt. Ltd., CG Foods Nepal Pvt. Ltd; making the First Potato Summit 2024 successful.

NICCI looks forward to further collaborations with its esteemed partners and stakeholders in the years ahead, ensuring the continued success and impact of the Potato Summit.

Comprehensive Report on First Potato Summit 2024 Proceedings

Date: Thursday, 30th May, 2024 (17th Jestha, 2081)

Venue: Alice Receptions, Gaihridhara, Kathmandu, Nepal.

Preview of the Summit

The Nepal-India Chamber of Commerce and Industry (NICCI), in collaboration with the Ministry of Agriculture and Livestock **Development** and the Food and Agriculture Organization (FAO) of Nepal, celebrated May 30, 2024, as International Potato Day by organizing the First whole day Potato Summit 2024 in Kathmandu. The event highlighted the importance of potatoes as a vital agricultural product and staple in the lives of Nepali citizens. It brought together a wide array stakeholders. including government



officials, industry leaders, researchers, farmers, and international experts, to discuss the current state and future of potato farming in Nepal.

The summit gathered dignitaries such as Honorable Agriculture and Livestock Development Minister Ms. Jwala Kumari Sah as Chief Guest, Mayor of Panchkhal Municipality Mr. Mahesh Kharel, Secretaries of the Ministry of Agriculture and Livestock Development Dr. Deepak Kumar Kharal (Agriculture), Dr. Rajendra Prasad Mishra (Livestock Development), and Industry, Commerce, and Supply Secretary Dr. Dinesh Kumar Ghimire.

The event also saw the participation of Ms. Januka Pandit, Joint Secretary (MoALD), Dr. Binod Sah, Assistant Representative of FAO Nepal, and Dr. Hari Bahadur K.C., Director General of the Agriculture Department, alongside members of various organizations and other industry bodies. Distinguished guests included Mr. Babukaji Thapa, Deputy General Manager of Agricultural Development Bank Ltd., and Mr. Suman Sekhar, First Secretary (Commerce) from the Embassy of India, Kathmandu. Apart from FAO Nepal and Agricultural Development Bank Ltd., the event was also supported by other stakeholder business organizations related to agriculture and value chain entities.

Key Sessions and Technical Discussions

The summit was divided into three main parts: the opening session, a series of three technical panel discussions, and the closing ceremony.

Several international and national representatives shared their insights. Mr. Ken Shimizu, FAO Country Representative for Bhutan and Nepal, emphasized the importance of global collaboration in agricultural

development. Ms. Monika Thatova from FAO delivered a keynote speech on the Global Potato Summit. Another keynote speaker, Mr. N.K. Jha, CEO of Technico Agriscience Limited, India, shared experiences from the neighboring country. Mrs. Januka Pandit, Joint Secretary at the Ministry of Agriculture and Livestock Development, presented Nepal's current status on potato production, gaps, and way forward.

The inaugural session was chaired by Dr. Deepak Kumar Kharal, highlighting the commitment to fostering innovation and collaboration in the potato industry.

Inaugural Session and Key Slogan



The Potato Summit 2024 was meticulously structured to foster meaningful dialogue and share valuable insights on key aspects of potato production, research, and innovation. With a diverse group of participants, including representatives from the government, nongovernmental organizations, financial institutions, and academic circles, the summit aimed to create a collaborative platform that would benefit Nepali potato farmers, enhance the country's agricultural practices, and pave the way for future growth in the sector. The session was inaugurated by Honourable

minister for Agriculture and Livestock Development of Nepal Ms. Jwala Kumari Sah.

The opening ceremony set the tone for the summit, graced by the Honorable Minister Ms. Jwala Kumari Sah and Secretary Dr. Deepak Kumar Kharal, who officially launched the event with the slogan: "Increase potato production and make the country independent." This reflected the summit's core objective—empowering Nepal's potato farming community and enhancing self-sufficiency in potato production.

This inaugural session not only marked a significant step forward in recognizing the immense potential of Nepal's potato industry, but also served as a critical juncture for advancing policies and strategies that could ultimately lead to the country's agricultural self-sufficiency.

1. Welcome Remarks

Delivering her welcome remarks, Mrs. Shreejana Rana, President of Nepal-India Chamber of Commerce & Industry (NICCI) extended a warm welcome to all attendees, acknowledging the collaboration with the Ministry of Agriculture and Livestock Development, and the Food and Agriculture Organization of Nepal (FAO-Nepal) to celebrate May 30, 2024, as International Potato Day, as declared by the Food and Agriculture Organization (FAO). She mentioned the partnership with Agricultural Development Bank Limited, highlighting its 56-year contribution to Nepal's agricultural development, and emphasized the significance of the first Potato Summit 2024 in Nepal and highlighted the importance of agriculture in Nepal's economy, particularly potato cultivation, as it is one of the world's most consumed food crops.

Ms. Rana spoke about Nepal's agricultural potential, noting the favorable climate for a variety of crops.

She emphasized that agriculture should be prioritized, along with addressing technological gaps, policy development, and youth involvement in farming. Referring to historical context, she noted that potatoes were introduced to Nepal for experimental purposes in the early 20th century, and with growing demand, production and cultivation have steadily increased. However, challenges like technology, storage, seed quality, training, and market access remain.



She expressed optimism about the rise in potato production in Nepal but also recognized the need for further technological advancements, training, and expert knowledge, particularly from neighboring countries. Ms. Rana reiterated that the summit's main goal was to share knowledge, foster innovation, and address the challenges faced by stakeholders in the potato industry.

The issue of youth migration was also discussed, with Mrs. Rana suggesting that agriculture could serve as a solution to encourage young people to stay in Nepal and contribute to the economy. She observed that many youths have already recognized the potential of agriculture and take pride in locally grown products. She stressed the need for expert knowledge and advanced technology to further enhance agriculture in Nepal.

Ms. Rana concluded by acknowledging the contributions of various organizations and individuals involved in the event, especially Mr. Binod Sah, Assistant FAO Representative (Programme), Mrs. Sushma Sharma, the coordinator of the summit, Executive Member and Convener of Micro, Small and Medium Enterprise Committee at NICCI and entire team of NICCI, and expressed her gratitude for everyone's efforts in making the summit a reality. (Full speech in annexure)

Keynote Speeches and Presentations

2. Keynote Speech by Mr. NK Jha, CEO of Technico Agri-Science Limited, India

In the Summit, **Mr. NK Jha**, CEO of **Technico Agri-Science Limited**, in his keynote speech, making an elaborated presentation, expressed gratitude to the Nepal-India Chamber of Commerce and Industry for organizing a timely workshop and emphasized the importance of the potato as a vital food source for the future, explaining its nutritional benefits and its potential to address global food and nutrition security challenges.

Mr. Jha highlighted the historical significance of the potato, noting its role in past crises like the Great Irish Famine and Bengal Famine, which underscored its importance as a global food source. With global



potato production reaching around 375 million metric tons, Asia contributing more than 50%, and an expected growth rate of 3.47%, potatoes are also used in various industrial applications, including potato powder, chips, starch, and even vodka and beer.

The speaker dispelled myths about potatoes causing obesity or high blood sugar by referencing a case where Chris Voigt, Director of the Washington Potato Commission, ate only potatoes for 60

days and saw positive health results. The speaker also discussed India's experience with potatoes, tracing the crop's introduction in 1778 and the subsequent growth of the industry. India now ranks as the second-largest potato producer globally, thanks to technological advancements, government efforts, and industry partnerships that have increased productivity and exports.

Looking ahead, the speaker expressed optimism for the future of the potato industry, especially with the growth of the global potato seed market. The presentation concluded with a call for increased awareness and collaboration to ensure that potato farming plays a crucial role in global food and nutrition security.

The keynote speaker, Mr. Jha, shared valuable insights into India's potato industry, highlighting its production in different varieties as per topography and climate in different parts of India and its second-place ranking in global potato trade, underlining the economic potential of the industry, and possibility of similar development in Nepal as well. (Full speech in annexure)

3. Presentation by Ms. Monika Thotova from the Food and Agriculture Organization (FAO).

Following Mr. Jha's presentation, attention shifted to the global potato scenario with the second keynote presentation, which aimed to offer a broader perspective on global trends in the potato industry. Despite some initial connection issues, Ms. Monika Thotova from the Food and Agriculture Organization (FAO), Senior Economist at the Food and Agriculture Organization (FAO) specializing in agricultural and food policies, rural and regional development, development economics, and agricultural trade and markets participated virtually in the Summit.



Ms. Thotova's presentation provided valuable insights into the global potato ecosystem, addressing various international challenges and opportunities within the sector. Although there were some audio issues during her speech, her expertise and detailed analysis of the global context were well appreciated by the audience. The information shared by Ms. Thotova helped deepen the understanding of the complexities of the global potato trade and production, and thoughtful analysis complementing Mr. Jha's earlier insights.

4. Keynote Speech by Mr. Ken Shimizu, the Country Representative of FAO for Bhutan and Nepal



In his keynote speech at the Potato Summit, Mr. Ken Shimizu, the Country Representative of FAO for Bhutan and Nepal, expressed gratitude for the opportunity to speak at the event. He emphasized appreciation FAO's the collaborative efforts between the Ministry of Agriculture and Livestock Development and the Nepal-India Chamber of Commerce and Industry in organizing the summit. He also thanked participants, moderators, and panelists for their enthusiastic

participation and valuable contributions.

Mr. Shimizu highlighted the recent decision by the United Nations General Assembly to designate May 30th as the International Day of Potato, with 2024 marking its first year under the theme *Harvesting Diversity and Feeding Hope*. He praised the potato for its nutritional value, climate-friendly properties, and its role in poverty alleviation and income generation.

Addressing challenges in potato cultivation, Mr. Shimizu noted the impact of viral and bacterial diseases and weaknesses in the value chain, including the availability of quality seeds, storage, processing, and marketing. He called for increased investment to strengthen the agricultural value chain and highlighted the role of the Nepal-India Chamber of Commerce and Industry and private companies in driving these efforts.

He also mentioned FAO's collaboration with the Government of Nepal to develop an investment plan for strengthening the value chain for highland potatoes, including investments in tissue culture labs, storage, and marketing. Furthermore, he spoke about enhancing the Nepal potato brand through geographical indications, supported by environmental sustainability, which could contribute to food security and poverty alleviation.

In conclusion, Mr. Shimizu reiterated FAO's commitment to supporting efforts to strengthen the potato value chain in Nepal and wished all attendees a fruitful summit. (Full speech in annexure)

5. Inaugural Remarks by Honorable Minister Ms. Jwala Kumari Sah at the Potato Summit 2024



At the Potato Summit 2024, Honorable Minister for Agriculture and Livestock Development, Ms. Jwala Kumari Sah, delivered an insightful address, emphasizing the importance of the summit in promoting potato cultivation in Nepal, acknowledging the contributions of previous speakers. She highlighted her commitment to advancing Nepal's agricultural sector and introduced the Agricultural Investment Decade (2081-2091), a government initiative aimed at funding agricultural

production, empowering farmers, and encouraging youth participation to achieve self-sufficiency.

She noted that Nepal produces potatoes on approximately two lakh hectares of land, yielding around 34 lakh metric tons, with a diverse range of potato varieties grown across the country. Given its rising demand in households, hotels, and restaurants, she stressed the need to increase production and improve quality. To support this, the Ministry, through the Prime Minister's Agriculture Project, has designated 20 zones and 2 super zones to enhance domestic supply and export potential for Nepali potato products, including processed items like chips.

Addressing challenges in potato farming, she highlighted concerns about crop diseases and infections and called for collaboration with researchers and stakeholders to mitigate these issues. She also underscored the nutritional value of potatoes and their role in ensuring food security.

In conclusion, Minister Sah reaffirmed the government's commitment to fostering a sustainable agricultural environment, urging collective efforts to boost production, enhance exports, and strengthen Nepal's position in the potato industry. She extended her full support for the initiatives discussed at the summit and wished for its success, emphasizing that cooperation and innovation would drive Nepal's agricultural growth. (Full speech in annexure)

6. Vote of thanks by Coordinator of the Potato Summit 2024, Mrs. Sushama Sharma

Mrs. Sushma Sharma, Coordinator of the Potato Summit 2024 and Convener of the Micro, Small, and Medium Enterprises (M/SME) Committee at NICCI, delivered the vote of thanks, expressing deep gratitude to all dignitaries, partners, and contributors who made the event a success.

She extended special appreciation to the Honorable Minister for Agriculture and Livestock Development, Ms. Jwala Kumari Sah, for her inspiring address and commitment to Nepal's agricultural advancement. She also thanked Dr. Deepak Kumar Kharal, Secretary of the Ministry of Agriculture and Livestock Development, for his leadership and support.

Mrs. Sharma acknowledged Mr. Suman Sekhar, First Secretary (Commerce) from the Embassy of India,

for his presence, and Ms. Shreejana Rana, President of NICCI, for her encouragement and contribution. She also expressed gratitude to government officials, private sector representatives, and financial institutions for their active participation.

A special mention was made of Ms. Monika Thotova, Senior Agro Economist from FAO, and Mr. Ken Shimizu, FAO Country Representative for Bhutan and



Nepal, for their valuable insights. She also highlighted the participation of farmers from Mustang, Panchkhal, Kapilvastu, and Parasi, whose experiences enriched discussions on grassroots agricultural challenges and opportunities.

Mrs. Sharma recognized the support from FAO-Nepal, Agricultural Development Bank Limited, Surya Nepal Pvt. Ltd., Salt Trading Corporation Limited, and other key sponsors. She also appreciated the Nepal Women Entrepreneurs Association (WEAN) for their active participation in the event.

She extended a special note of thanks to the organizing teams from NICCI and FAO-Nepal and Mr. Dumbar Khanal, Co-Convener of the M/SME Committee at NICCI for their dedication in making the summit a success.

Concluding her remarks, Mrs. Sharma encouraged participants to actively engage in upcoming discussions and emphasized the need for continued collaboration to ensure the growth and prosperity of Nepal's potato industry and agricultural sector. (Full speech in annexure)

7. Closing Remarks by Mr. Deepak Kumar Kharal, Secretary at the Ministry of Agriculture and Livestock Development, GoN

In his closing remarks, Mr. Deepak Kumar Kharal emphasized the significance of the summit as a first-of-its-kind event that explored various aspects of the potato industry, including production, breeding, and sector challenges. He stressed the importance of learning from technical, legal, and operational perspectives to boost productivity in the industry.

Mr. Kharal expressed his hope that the summit would positively impact farmers and promote growth in the sector. He acknowledged the cultural association of potatoes with failure in Nepal but emphasized that today's focus was on their potential to drive positive change for the agricultural future.



Addressing challenges, Mr. Kharal highlighted the underutilization of arable land in Nepal, noting that one-fourth of the land remains barren. He called for solutions to make better use of this land for potato cultivation. He also mentioned the issue of crop damage from monkeys and hoped that the upcoming technical sessions would provide solutions to improve productivity and reduce crop infections.

Stressing the strategic importance of

potatoes, Mr. Kharal reiterated the government's goal of achieving self-sufficiency in potato production. He expressed gratitude to the farmers for their dedication and hoped the summit would inspire further advancements in the sector.

In conclusion, Mr. Kharal acknowledged the contributions of stakeholders, including businesses, researchers, government agencies, and development partners, who support the growth and industrialization of potatoes. He extended his thanks to the farmers for their very active participation and expressed his hope that the summit's insights would help them improve their practices. Mr. Kharal reaffirmed the government's commitment to advancing the potato sector in Nepal. (Full speech in annexure)



Glimpses of the First Potato Summit 2024





Plenary Session I – Panel Discussions - Seed and Table Potato Value Chain Theme: Cultivating Excellence, Nurturing Innovation, and Sustainability

The first panel discussion of the Potato Summit commenced with the theme "Cultivating Excellence, Nurturing Innovation, and Sustainability." This theme underscored the commitment to advancing the potato industry while ensuring its sustainability for future generations. The panel discussion, focusing on the "Seed and Table Potato Value Chain," featured distinguished panelists from various sectors of the potato industry. The panelists included:

Moderator: Dr. Bhim Bahadur Khatri, retired senior scientist of Nepal Agricultural Research Council (NRAC)

Session Recorder: Mr. Mani Ratna Aryal, a senior agricultural economist

Panelists:

- 1. Mr. Santosh Dahal, Seed Producer, Ficus Biotech Tissue Culture Lab
- 2. Mr. Yuvaraj Bhusal, Senior Scientist, National Potato Research Program Nepal Agricultural Research Council (NARC)
- 3. Ms. Srinu Kumari Jha, Plant Protection Officer, PMAMP-PIU Sindhupalchowk Potato Super Zone
- 4. Dr. Binod Sah, Assistant Representative, FAO
- 5. Mr. Prakash Gajurel, Secretary, Potato Trade Association, Kalimati
- 6. Mr. Mohan Shrestha, Seed Producer and Potato Farmer, Lisankhu Pakar-4, Sindhupalchowk

Opening Remarks by the Moderator

Dr. Bhim Bahadur Khatri, welcoming the panelists and attendees, emphasized the importance of the discussion for stakeholders across the potato industry, from farmers to traders and consumers. He provided a brief historical overview, noting that potato cultivation in Nepal dates back over 200 years, based on records from British Colonel Kirkpatrick in 1793. According to his diary, farmers in Kathmandu were dependent on potato seeds from Patna, India, a fact that highlights the long-standing challenges in seed availability.

Panel Discussions

1. Mr. Santosh Dahal, Seed Producer, Ficus Biotech Tissue Culture Lab

Dr. Khatri introduced the first panelist, **Mr. Santosh Dahal**, from Ficus Biotech, a leading producer of pre-basic seed through tissue culture. Mr. Dahal explained the challenges posed by disease outbreaks in potato cultivation and how Ficus Biotech, supported by the Government of Nepal, has been instrumental in producing disease-free pre-basic seeds. He highlighted that approximately 20-25% of pre-basic seeds in Nepal are supplied by Ficus Biotech, contributing to improved productivity and quality. The growing demand from farmers has motivated the company to expand its operations.

- Key points of Mr. Dahal on Seed Production and Quality Improvement were followed:
 - o Ficus Biotech produces disease-free pre-basic potato seeds in a controlled environment.
 - 20-25% of pre-basic seeds in Nepal come from Ficus Biotech, contributing to higher production efficiency.
 - o Positive feedback from farmers has increased demand for quality seeds.

- Acknowledged challenges from the perspective of the private sector in seed production:
 - o Lack of technical expertise and research in government bodies.
 - o Absence of proper certification for pre-basic seeds (PBS), affecting marketing.
 - o Government grants focused solely on production rather than creating a conducive environment for private enterprises.
 - Suggested that the government focus on creating a better business environment rather than providing grants.



2. Mr. Yuvaraj Bhusal, Senior Scientist, National Potato Research Program Nepal Agricultural Research Council (NARC)

The discussion then moved to Mr. Yuvaraj Bhusal, who provided insights into the role of NARC in developing and producing pre-basic seeds since 1972. He acknowledged that current pre-basic seed production is insufficient to meet national demand and emphasized the need for collaboration between public and private sectors for quality control. He also stressed the importance of replacing degenerated seeds, which are still widely used and negatively impact productivity.

- Key points of Mr. Yuvraj Bhushal:
 - NPRP develops and produces various categories of seeds based on regional needs and market demands.
 - Current pre-basic seed production is insufficient for national demand.
 - o NARC collaborates with private companies for seed production, ensuring virus-free seed distribution through mother culture testing.

- Degenerated seeds (virus-infected and less productive) remain a challenge; replacement with quality seeds is critical.
- Government sets rules, but private sector involvement is necessary for quality control and seed system improvement.
- Acknowledged the issues raised by panelists and outlined the government's approach:
 - Transitioning seed marketing responsibilities to the private sector while focusing on quality control.
 - Developing new technologies and preserving mother cultures for better seed quality.
 - Emphasized the value chain model, where a 12% increase in production could make Nepal selfsufficient.
- Mentioned ongoing efforts in technology development and better seed production for long-term improvements.

3. Dr. Binod Sah, Assistant Representative, FAO

Dr. Khatri then invited **Dr. Binod Sah** from FAO to discuss the seed and table potato value chain. Recognizing Dr. Sah's extensive experience in seed production at the farmer level and his contributions to development initiatives, Dr. Khatri requested his insights on making private and government sector efforts more effective in improving seed systems and overall value chain development.

Insights from Dr. Binod Sah

Dr. Sah began by expressing gratitude for being invited to the discussion, emphasizing his deep connection with potatoes as his career started with seed-related programs in remote areas. He described potatoes as a strategic poverty alleviation crop due to their cultivation across Nepal's diverse agro-ecological zones. He highlighted the need to capitalize on the country's unique geographic advantage in potato production.

He pointed out that although potatoes rank fifth in cultivated area, they are second in production and first in productivity. Despite this, the potential of potatoes in addressing food security and poverty reduction remains underutilized. Dr. Sah stressed the need for stronger seed systems, noting that while Nepal has seven laboratories producing virus-free pre-basic seed, demand still outpaces supply. The open border with India has led to an influx of degenerated seeds, exacerbating productivity issues.

He explained the structured seed production process, from pre-basic seed (equivalent to zero generation) to BS1 (foundation seed) and subsequent generations. However, he noted that many farmers use pre-basic seed for direct consumption rather than for seed multiplication, which weakens the supply chain.

Dr. Sah emphasized the necessity of policy interventions to regulate seed production and certification while integrating private sector engagement to ensure quality standards. He concluded by advocating for two parallel value chains—one for seed potatoes with robust certification mechanisms and another for table potatoes to capitalize on off-season exports to India's Indo-Gangetic plains.

- FAO's Contribution and On-the-Farm Research
 - FAO has worked on seed production at the farmers' level, bringing changes through field-level projects and research.
 - Emphasis on introducing best practices for potato farming and seed production in difficult regions of Nepal.
- Panel Speaker Mr. Binod Sah shared insights on the potato value chain and ways to maximize profits for stakeholders as follows:
 - Suggests capitalizing on agroecology and involving private sectors in all seed value chain stages.
 - Advocates for branding highland seed potatoes with proper certification for both domestic and international markets.
 - o Calls for government policy support, infrastructure development, and foreign investment.
 - Emphasizes contract farming and branding for table potatoes to tap off-season markets in Bihar and Uttar Pradesh.

4. Mr. Prakash Gajurel, Secretary, Potato Trade Association, Kalimati

Mr. Prakash Gajurel expressed gratitude to NICCI for recognizing Nepal's first-ever Potato Day, made possible by the Nepal-India Chamber of Commerce and Industry. Following Dr. Sah's analysis, Mr. Prakash Gajurel shared his perspective based on 18 years in the potato trade. He highlighted that potatoes, a staple in Nepalese cuisine, are often dubbed the "king of vegetables." He pointed out inefficiencies in the current production and distribution practices, particularly the lack of grading and proper packaging, which results in issues like market manipulation and unfair pricing for farmers.

Insights from Mr. Prakash Gajurel

Mr. Gajurel discussed the gaps in Nepal's potato production and marketing systems. He noted that while Nepal's production rate is competitive globally, logistical inefficiencies hinder its full potential. Farmers still sell ungraded potatoes, leading to price inconsistencies. He advocated for systematic grading and packaging to enhance transparency and fair pricing for farmers, traders, and consumers. He also pointed out deceptive selling practices, such as placing larger potatoes on top of sacks to give a false impression of overall quality.

Another major issue he highlighted was land degradation due to repeated cultivation of the same variety in the same supply, with the long-term goal of achieving self-sufficiency and even exporting Nepali potatoes.

- Key observations included:
 - Farmers often pack potatoes with smaller or defective ones hidden at the bottom of sacks, which creates problems when sold in bulk.
 - Repeated cultivation of the same variety in the same location leads to potato diseases and degeneration.
 - o Lack of proper education on seed grading further compounds issues for farmers.

- Need for consumer awareness regarding the distinction between Nepali and imported potatoes.
- o Challenges with taxation policies and weight discrepancies during transportation.
- He emphasized that better government intervention, research, and market management could enhance Nepal's potato production and potentially replace imports or lead to exports.
- Panel Speaker Mr. Gajurel's concluding suggestions
 - Highlights that local potatoes from Sindhupalchok and Salyan have replaced Bhutanese imports.
 - o Suggests government-led training and collection mechanisms for efficient distribution.
 - Emphasizes the need to address accusations against middlemen and manage price differences caused by border invasions.

5. Ms. Srinu Kumari Jha, Plant Protection Officer, PMAMP-PIU Sindhupalchowk Potato Super Zone

Ms. Jha, an Agriculture Officer working in the Potato Super Zone under the Prime Minister Agriculture Modernization Project, provided a comprehensive field perspective on potato production challenges. She shared an anecdote about the vibrant scene of families harvesting potatoes in Panauti Nala, illustrating the cultural and societal aspects of potato farming in Nepal.

- Key points she addressed:
 - Seed Quality: Persistent issues with virus-borne diseases in potato seeds and the importance of producing virus-free seeds.
 - Scab and Plant Diseases: The appearance of scab on potato skin, which is unattractive to consumers, remains a challenge. Testing chemical solutions for this issue is underway.
 - Climate Challenges: Problems such as jotuwa (drought) due to global warming impact production and storage.
 - Wild Animal Pests: Post-harvest losses caused by wild boars and other animals are a significant concern
 - Policy Suggestions: Advocated for applying the Public-Private Partnership (PPP) model in the production process and production management to mitigate losses and improve overall output.
- Panel Speaker Ms. Srinu's suggestions:
 - o Identifies three potato consumption categories: vegetable, savory item, and staple food.
 - Stresses the importance of strengthening quarantine for seed and potato trade.
 - Advocates utilizing organic potatoes from remote areas without transportation and fertilizers.
- Ms. Jha concluded by expressing optimism for better outcomes and welcomed further discussions in subsequent rounds.

7. Mr. Mohan Shrestha, Seed Producer and Potato Farmer, Lisankhu Pakar-4, Sindhupalchowk

Next Panel Speaker Mr. Mohan Shrestha shared practical experiences in seed production and cultivation in Sindhupalchowk, highlighting key challenges faced by farmers and suggesting actionable recommendations to enhance productivity and sustainability.

- Key Challenges Identified:
 - Insufficient production of virus-free pre-basic seeds.
 - o High prevalence of degenerated seeds reducing productivity.
 - o Limited collaboration between public and private sectors for seed production.
 - o Regulatory and quality control issues in seed distribution.

• Recommendations:

- o Strengthening public-private partnerships for seed production and quality assurance.
- o Enhancing research and extension services to address seed degeneration.
- o Increasing awareness among farmers about the importance of quality seed replacement.
- o Government support in creating a conducive environment for private sector involvement.
- Additional Insights from Mr. Mohan Shrestha (Potato Farmer and Seed Producer):
 - Highlighted the struggles faced by potato farmers due to traditional farming methods and lack of institutional support.
 - Shared a success story where training transformed his yield from 16 kilos to 42 kilos per 50-60 sacks of seed.
 - Emphasized the importance of training, adopting better seeds, and commercialization strategies.
- Additional Challenges Identified:
 - o Budget constraints for training programs.
 - o Challenges in cold storage distribution.
 - o Inadequate training for uneducated farmers, affecting production quality.
- Final Suggestions by Mr. Mohan Shrestha:
 - Address the gap between production and distribution.
 - o Assign government volunteers to bridge the gap and facilitate local seed access.
 - o Prioritize financial planning and training support to uplift farmers.

Key takeaways from the discussion include:

- Strengthening seed systems by increasing virus-free pre-basic seed production and reducing dependency on degenerated seeds.
- Enhancing collaboration between government bodies, research institutions, and private enterprises to create a robust seed value chain.
- Investing in farmer training and extension services to improve production techniques and seed replacement awareness.
- Developing policy interventions to regulate seed certification, encourage contract farming, and facilitate private sector involvement.
- Improving market infrastructure by standardizing grading, ensuring fair pricing, and addressing logistical inefficiencies.

Closing Remarks by the Moderator

Dr. Khatri summarized the key takeaways from the session, reinforcing the need for seed system improvements, better certification mechanisms, enhanced market structures, and stronger public-private collaboration. The conclusion was as follows:

The first plenary panel discussion of the Potato Summit 2024 provided valuable insights into the Seed and Table Potato Value Chain, addressing critical challenges and identifying pathways for improvement. The session highlighted the urgent need for quality seed production, stronger public-private collaboration, improved market structures, and enhanced regulatory mechanisms to ensure sustainability in Nepal's potato sector.

The session concluded with a call for immediate action and collective efforts from policymakers, industry stakeholders, and farmers to transform Nepal's potato industry into a self-sustaining and export-oriented sector.



Plenary Session II – Panel Discussion Innovating Potato Processing & Value Addition of Potato

Moderator: Mr. Sandesh Paudel, Agri-Business Coordinator, Kings College

Panelists:

- 1. Dr. Hari Bahadur KC, DG, Department of Agriculture, Ministry of Agriculture and Livestock Development (MoALD), GoN
- 2. Ms. Shakuni Rasauli, Chips Producers from Mustang Federation of Women's Entrepreneur Association of Nepal (FEWEAN)
- 3. Ms. Urmila Shrestha, CEO, Salt Trading Corporation Limited
- 4. Mr. Sangam Kc MD, Odat Food and Beverage Pvt. Ltd.
- 5. Mr. Ram Saran Timalshina, Deputy GM, Muktinath Krishi Private Limited



Opening Remarks by the Moderator

Mr. Sandesh Paudyal, welcoming the panelists and attendees, Mr. Sandesh Paudyal began the session by framing the discussion around value chain enhancement and asked panelists focused questions on potato consumption trends, quality assurance, branding, packaging, and technological advancements.

The second panel discussion on **"Innovating Potato Processing & Value Addition of Potato"** highlighted key insights from various experts:

Panelist Contributions

1. Dr. Hari Bahadur KC - Government Perspective on Agriculture & PPP Model

Dr. Hari Bahadur KC provided an overview of the government's initiatives in potato research and policy support. He highlighted the National Potato Research Center (NPRC) and Nepal Agricultural Research Council (NARC) as key institutions working on seed production, disease management, and post-harvest technology. However, he acknowledged the challenges in ensuring farmers' access and adaptation to new technologies.

He emphasized the success of PPP models in tissue culture initiatives, where the government facilitated private sector involvement in lab-based potato propagation. He suggested a structured intermediary system for collection, grading, and packaging to ensure farmers receive fair prices while maintaining quality standards.

Dr. KC also pointed out budget inconsistencies, citing the removal of VAT on potatoes as a positive step but stressed the need for long-term financial planning to support local production.

2. Mr. Sangam KC - Food Manufacturer's Perspective

Mr. Sangam KC discussed the rising demand for processed potato products, such as chips and French fries, particularly in urban centers like Kathmandu. However, he highlighted a shortage of high-quality potatoes, making it difficult to fully rely on local supply.

He stressed the importance of middle-layer processors to bridge the gap between farmers and large-scale manufacturers, handling grading, storage, and primary processing. He also urged the government to focus on disease control, yield improvement, and storage infrastructure to support manufacturers.

3. Ms. Shakuni Rasauli - Women Entrepreneurs & Small-Scale Processing Challenges

Ms. Shakuni Rasauli shared her experiences as a woman entrepreneur in the potato processing sector, emphasizing difficulties in securing a consistent supply of quality potatoes. She highlighted the effectiveness of her "cash in hand" approach in building trust with farmers and ensuring steady raw material availability.

She strongly advocated for government support in branding and export facilitation, arguing that Nepal has the potential to sell its potato-based products internationally if proper labeling, certification, and marketing strategies are in place.

She also stressed the organic nature of Mustang potatoes, which receive minimal pesticide use, making them ideal for premium organic markets.

Ms. Rasauli called for:

- Better logistics, financial grants, and incentives at all government levels.
- Policy integration of agriculture and tourism to promote agro-tourism alongside potato farming.

4. Mrs. Urmila Shrestha - Importance of Branding, Packaging, and Market Expansion

Mrs. Urmila Shrestha emphasized that branding and packaging are crucial for enhancing market value and expanding export potential. She noted that grading, quality control, and innovative packaging can improve consumer convenience and competitiveness in international markets.

She urged the government to support branding initiatives and provide financial incentives for modern processing facilities. Additionally, she recommended:

- Utilization of Nepal's barren lands for increased potato cultivation.
- Removal of VAT on packaging materials to lower costs and encourage investment in high-quality branding.

5. Mr. Ram Saran Timilsina - Technological Advancements & Sustainable Farming

Mr. Ram Saran Timilsina provided insights into modern farming techniques and post-harvest management. He introduced the apical root cutting method, a cost-effective approach to potato seed production, successfully tested in Chitwan.

He emphasized:

- Mechanization in farming, from harvesting to post-harvest storage, to reduce wastage and improve
 efficiency.
- Private sector investment in agricultural research institutions to drive innovation in seed development and disease management.
- Adoption of the Public-Private Cooperative Partnership (PPCP) model to integrate government, private companies, and farmer cooperatives for a sustainable agricultural ecosystem.

Key Takeaways and Recommendations

1. Government Support & Policy Reform

- Ensure policy stability and financial incentives for farmers and processors.
- Provide grants and subsidies to encourage private sector investment in agriculture.
- Establish a structured PPP model to facilitate modern farming practices and post-harvest management.

2. Production & Processing Enhancements

- Expand mechanization to improve yield and quality.
- Support research institutions in seed development and disease management.
- Develop middle-layer processing units for storage, grading, and distribution.

3. Market Expansion & Branding

- Promote Nepali potatoes as a premium organic product, particularly Mustang potatoes.
- Facilitate branding and export of processed potato products.
- Remove VAT on packaging materials to encourage affordable, high-quality packaging solutions.

4. Infrastructure & Logistics Development

- Invest in cold storage facilities to reduce post-harvest losses.
- Improve transportation networks to enhance market access for farmers.
- Utilize barren lands for domestic potato production, reducing import dependency.

Closing Remarks by the Moderator

Mr. Sandesh Paudel, thanking all the panelists for their contributions, reflected on the panel discussion, emphasizing:

- The need for realistic expectations from government programs, given budget constraints.
- The importance of a resource-driven approach in policy formulation and implementation.
- The value of multi-stakeholder collaboration to achieve sustainable growth in Nepal's potato industry.



Moderator: Ms. Sunita Nhemaphuki, CEO, R&D Innovative Solutions Pvt. Ltd.

Panelists:

- 1. **Mr. Ashish Sharma** Managing Director, Agri Vastu Cold Storage, Kapilvastu
- 2. **Mr. Babukaji Thapa** Deputy General Manager, Agriculture Development Bank Ltd.
- 3. **Mr. Devendra Chaudhary** Farmer, Mahadev Krishi Sahakari Sanstha Ltd., Producer from Parasi District
- 4. **Ms. Sabnam Siwakoti** Joint Secretary and Spokes Person, Ministry of Agriculture and Livestock Development (MoALD)
- 5. Mr. Mahesh Kaharel Mayor, Panchkhal Municipality, Kavre District, Local Government
- 6. **Mr. Samir Kumar Das** Industry Expert, Head of Channel Sales at Technico Agriscience Limited, India.

Opening Remarks by the Moderator

Ms. Sunita Nhemaphuki welcomed the panelists and attendees, sharing personal reflections on the importance of potatoes in daily life and global agricultural economies. She recalled her experiences in Norway, where potato consumption significantly impacted societal development, and mentioned innovative uses of potatoes, such as biodegradable utensils. She emphasized that private sector involvement is crucial for advancing Nepal's potato industry and acknowledged the limited government budget allocated to agriculture. She then opened the discussion by asking Mr. Ashish Sharma about the challenges faced by private sector investors in the potato value chain.



Panelist Contributions

1. Mr. Ashish Sharma - Challenges in Cold Storage & Infrastructure and Role of Government in Private Sector Enablement

Mr. Ashish Sharma began by emphasizing the immense potential of potatoes as a diverse and easy-to-process crop, both globally and in Nepal. He pointed out that, despite Nepal's growing demand for processed potato products, post-harvest infrastructure remains underdeveloped. As the MD of a cold storage facility, he highlighted that potato storage in Nepal is inefficient, with many facilities being used for grains and fruits rather than potatoes. He noted that without an integrated system from farm to consumer, potato processing will not reach its full potential.

- The bureaucratic delays in government approvals hinder private sector investments.
- Shared a personal experience where he had to wait seven months for herbicide approval at the border.
- Suggested the integration of storage and processing facilities to ensure a seamless supply chain from farm to consumer.

Mr. Ashish Sharma further elaborated on the private sector's role in agricultural development, stressing that entrepreneurs and investors are capable of creating efficient business models. However, he pointed out that government policies often create unnecessary barriers, such as unequal insurance rates and the removal of essential financial incentives. He called for equal treatment of agriculture in insurance policies and reinstatement of interest grants that were removed due to policy mismanagement.

- Highlighted unfair insurance policies, where agriculture has a 3% premium, while land and construction have only 1.5%.
- Requested reinstatement of interest grants, which were removed due to misuse by some individuals.
- Stressed that private sector only requires facilitation, not full government grants.

2. Mr. Babukaji Thapa - Banking & Financial Support for Potato Farming

Mr. Babukaji Thapa spoke about the banking sector's role in supporting agricultural development, particularly in the potato industry. He acknowledged that, while Nepal recognizes potato as an important crop, the funding allocation remains minimal due to limited commercialization. He stressed that banks are willing to invest in potato farming, but the challenge lies in farmers' small-scale operations that make large investments risky. He emphasized the importance of transitioning from subsistence to commercial farming to attract financial support.

- The total agricultural investment in Nepal is 6.5 Kharba (650 billion NPR), but potato farming gets a minimal share.
- Commercialization is essential to increase financial viability and attract investment.
- ADB provides funding options from 50,000 NPR to large-scale cold storage projects.

• Encouraged farmers to scale up their production and move from subsistence farming to commercial production.

3. Mr. Devendra Chaudhary - Farmer's Perspective on Market & Land Availability

Mr. Devendra Chaudhary, a farmer and engineer, shared his personal journey in potato farming and how he overcame marketing challenges. Initially, he struggled to find buyers for his produce, which led him to adopt a door-to-door sales approach. This decision significantly boosted his sales, but it also created a new challenge—product shortages due to increased demand. He emphasized the importance of market linkage, as well as land access for farmers looking to expand.

- Door-to-door sales helped him build a customer base and increased demand for his potatoes.
- Faced land constraints, preventing him from expanding production.
- Requested government support in securing agricultural land for commercial-scale farming.

4. Ms. Sabnam Siwakoti - Government's Perspective on Policy & Implementation

Ms. Sabnam Siwakoti provided insights into the government's role in agricultural development, acknowledging that policies exist, but implementation is inconsistent. She pointed out that insurance policies, financial support programs, and cold storage initiatives have been introduced, but farmers and investors face hurdles due to a lack of policy continuity. She emphasized that better coordination among central, provincial, and local governments is essential for effective agricultural policies.

- Various policies exist for insurance, finance, and subsidies, but inconsistent implementation hampers effectiveness.
- Cold storage policies are unclear, particularly regarding ownership and insurance coverage.
- Better coordination between central, provincial, and local governments is necessary to streamline agricultural support programs.

5. Mr. Mahesh Kaharel - Local Government's Role in Commercializing Potato Farming

Mr. Mahesh Kaharel highlighted that local governments have a key role in bridging the gap between financial institutions and farmers. He stressed that loan misuse is a significant challenge and suggested that local governments should be involved in loan approval processes. He also pointed out that Panchkhal Municipality has thousands of hectares of land available for potato cultivation, making it an ideal location for private sector investment in processing industries.

- Loan misuse is a major issue, and banks should consult local governments before approving loans.
- Cold storage insurance should be structured so that farmers, as beneficiaries, receive direct claims.
- Panchkhal Municipality has 3,500 hectares of fertile land, ideal for commercial potato farming.
- Invited private investors to invest in potato processing industries within the municipality.

6. Mr. Samir Kumar Das - Strategic Planning for Long-Term Growth

Mr. Samir Kumar Das emphasized that the path to self-sufficiency in potato production requires action, not just planning. He stressed that all stakeholders—government, private sector, and farmers—must execute their plans effectively to achieve their 2030 agricultural targets.

- Planning alone will not bring change; implementation on the ground is necessary.
- A collaborative approach is required, involving government, private sector, and farmers.

Session Takeaways & Recommendations

1. Strengthening Cold Storage & Post-Harvest Infrastructure

- Integrate cold storage with processing units to create a seamless supply chain.
- Revise insurance policies to provide equitable coverage for agriculture and other businesses.

2. Expanding Financial Support for Farmers & Investors

- Increase investment in commercial potato farming to attract larger bank loans.
- Better monitoring of agricultural loans to prevent misuse.

3. Enhancing Policy Consistency & Government Facilitation

- Maintain consistency in policies related to insurance, finance, and subsidies.
- Improve coordination between local and central government for effective policy implementation.

4. Encouraging Commercialization & Market Expansion

- Expand contract farming to ensure stable supply and demand.
- Develop branding and marketing strategies for Nepali potatoes in local and international markets.

5. Promoting Research, Innovation & Training

- Focus on seed development, irrigation, and mechanization to boost productivity.
- Provide training programs for farmers on post-harvest management.

Closing Remarks by the Moderator

Mrs. Sunita Nhemaphuki summarized the discussion, emphasizing that both internal and external challenges exist in Nepal's potato industry. Internal challenges can be solved by farmers, investors, and businesses, while external challenges require government intervention in policy reforms, infrastructure, and financial support.

She concluded the session by thanking panelists, audience members, and stakeholders for their valuable insights and suggestions, reinforcing the importance of collaboration in achieving self-sufficiency in potato production by 2030.



Closing Session of the Potato Summit, 2024

The First Potato Summit 2024 concluded with insightful discussions, key recommendations, and a collective commitment to strengthening Nepal's potato industry. The closing session featured valuable remarks from distinguished speakers, highlighting the potential, challenges, and future direction of Nepal's potato sector.

Keynote Speech (Presentation) on - Current Status of Potato in Nepal, Gaps and Way Forward – MoALD, GoN, perspectives, by Mrs. Januka Pandit, Joint Secretary, MoALD,

Mrs. Januka Pandit, representing the National Potato and Vegetable Spice Crop Development Center, delivered a keynote presentation on "Current Status of Potato in Nepal, Gaps, and Way Forward" at the Potato Summit 2024. She highlighted the importance of potatoes in Nepal's food security, economy, and agricultural sector, emphasizing their widespread consumption from the Terai to the high hills. Current Status of Potato in Nepal



Potato is a major agricultural crop in Nepal, ranking sixth in cultivated area, second in production, and first productivity. It contributes 6.35% to the Agricultural Gross Domestic Product (AGDP). Nepal's per capita potato consumption is 111.8 kg, and to diverse climatic conditions, the crop can be cultivated year-round.

The hill region leads in both area (46.07%) and production (47.81%), while Bagmati

Province records the highest productivity (19.57 metric tons per hectare). 166 production pockets have been identified by the government, and several local varieties such as Kathmandu Local, Jumli Local, and Bajhang Local are widely cultivated. However, Nepal still lags behind Pakistan and other leading Asian countries in potato productivity.

Seed Production and Trade

Nepal has seven Pre-Basic Seed (PBS) production organizations, but supply does not fully meet demand. The country exports potatoes to Australia, Japan, Italy, and Seychelles for industrial purposes like potato flour and frozen fries, but imports a significant amount from India, China, Indonesia, and Bangladesh, including seed potatoes, frozen potatoes, and chips. FAO data shows that potato imports have been increasing over the years, highlighting the need for domestic self-sufficiency.

Government Policies and Institutional Support

The Government of Nepal has implemented various policies to promote potato cultivation, including:

- Right to Food and Food Sovereignty Act
- Plant Quarantine and Protection Regulation
- Seed Act 2045 and Seed Certification Directives, 2017
- Potato Pre-Basic (PBS) Seed Production and Certification Standard, 2022

Additionally, institutions like MOALD, NARC, and SQCC work at the federal level, while provincial and local governments support farmers through agricultural programs. The National Center for Potato, Vegetables, and Spice Crops Development (NCPVSCD) operates four satellite farms to enhance seed quality, research, and technical training.

Challenges in the Potato Sector

Despite its growth potential, Nepal's potato sector faces several challenges, including:

- Limited storage facilities for pre-basic seeds (PBS)
- No insurance coverage for potatoes in cold storage
- Mismatch between seed supply and demand
- Deteriorating quality of True Potato Seed (TPS) parental lines
- Limited market access and weak post-harvest infrastructure

Opportunities and Way Forward

To achieve self-sufficiency, Nepal must:

- 1. Expand potato farming in the mid-hills and high hills
- 2. Enhance seed supply chains and invest in cold storage facilities
- 3. Promote branding and marketing of Nepali potatoes
- 4. Increase processing industries for value-added products like chips and fries
- 5. Introduce insurance schemes for stored potatoes
- 6. Encourage research and policy improvements for long-term growth

Ms. Pandit concluded by proposing that May 30 be recognized as "Potato Day" in Nepal, emphasizing the need for collaboration among stakeholders to boost production, self-sufficiency, and exports.

Keynote Speech by Mr. Shyam Dhakal, Director, First Choice Foods Pvt. Ltd.

Mr. Shyam Dhakal emphasized the importance of self-sufficiency in the potato industry by addressing challenges in seed production, cold storage, processing, and market expansion. He noted that only four of Nepal's seven private tissue culture labs are operational, making seed production inadequate. To reduce dependency on imports, he recommended government-supported buy-back guarantees to encourage proper seed multiplication cycles.

Discussing cold storage infrastructure, he highlighted that 9 to 10 dozen cold storage facilities exist, but many lack temperature and humidity control, affecting quality. He urged the establishment of separate storage conditions for seed potatoes and processing potatoes to enhance efficiency.

In potato processing, Mr. Dhakal stressed the need to diversify production beyond traditional Masyaura and potato flour into high-value processed products like French fries, chips, flakes, and starch. He pointed out that Nepal imports 8,000–10,000 tons of processed potato products annually, despite having potential for domestic production and exports.

To support the industry, he proposed soft loans, subsidized electricity rates, and tax relief programs to attract



investment. He concluded by urging stronger collaboration between the government, private sector, and research institutions to make Nepal a regional leader in potato processing. (Full speech in annexure)

Hand-in-Hand Initiative by FAO: <u>A Collaborative Approach to Agricultural Investment – Mr. Shankar Sapkota, FAO Nepal</u>



Mr. Shankar Sapkota provided an overview of the Hand-in-Hand Initiative, a global FAO-led program aimed at enhancing agricultural investment and business collaboration. Implemented in 67 countries, including Nepal, the initiative has mobilized \$3 billion in investments worldwide.

He outlined four key factors for attracting investment in Nepal's agriculture:

Land Availability – Large unused

farmland suitable for commercial agriculture.

- Economically Active Population A significant labor force engaged in farming.
- Access to Quality Water Ample water resources for irrigation.
- Energy Access Increasing electrification supporting agribusiness.

Mr. Sapkota highlighted highland potatoes as a key investment priority, along with large cardamom and Sichuan pepper (Timur). FAO Nepal is conducting economic analyses and market research to attract investments and improve agricultural productivity.

He urged continued collaboration between the government, private sector, and FAO Nepal to ensure sustainable growth in Nepal's agricultural sector. (Full speech in annexure)

Declaration and Recommendations of the Summit



Mrs. Januka Pandit, Joint Secretary, Ministry of Agriculture and Livestock Development and member of the organizing committee presented the key recommendations from the summit, focusing on seed production, research, processing, marketing, and infrastructure development.

Key Recommendations:

- Seed Production & Value Chain Development
- Regulate the potato seed system to ensure quality control.
- Encourage private sector investment in seed potato production.
- Protect local potato varieties through geographical indications (GI).
- Research & Technology Development
- Support research institutions to develop high-yield potato varieties.
- Expand training and technical support for farmers to bridge knowledge gaps.
- Infrastructure Development
- Improve cold storage facilities and irrigation systems for stable production.
- Promote barren land utilization for potato farming.
- Marketing & Branding
- Brand local varieties such as Bajhang and Mudhey potatoes for better market reach.
- Establish structured supply chains with improved grading and packaging.
- Policy & Government Support
- Introduce minimum support prices for seed potatoes.
- Encourage public-private partnerships (PPP) for long-term industry development.

Mrs. Pandit concluded by calling for continued collaboration and policy implementation to achieve a self-sufficient and competitive potato sector in Nepal. (*Details in annexure*)



Remarks by Mr. Umesh Shrestha, Special Guest of the Closing Session, and Former Minister of State for Education & Agriculture Entrepreneur

Mr. Umesh Shrestha emphasized Nepal's untapped agricultural potential, drawing from his own experiences in the education and agriculture sectors. He noted that Nepal is like a "chicken that lays golden eggs" but lacks the right policies to utilize its resources effectively.

He called for government reforms in:

- Supply chain management to ensure market access for farmers.
- Buy-back guarantees to protect farmers from market fluctuations.
- Integrated farming models for better efficiency.

Mr. Shrestha urged the private sector to play a more active role in modernizing Nepal's agriculture and emphasized that with the right investments, Nepal can become self-sufficient in potato production. (*Details in annexure*)

Concluding Remarks of the Potato Summit by Dr. Rajendra Prasad Mishra, the Chief Guest of the Closing Session, Secretary, Ministry of Agriculture and Livestock Development

Dr. Rajendra Prasad Mishra, concluding the session, highlighted the significance of potatoes in food security and economic growth. He emphasized that Nepal's regional potato varieties are underutilized and encouraged investment in input supply, production, value chain development, and marketing.

He reassured that the government is committed to promoting and supporting potato cultivation, especially in highland areas, where Nepal has a competitive edge. He called for stronger linkages between industries and farmers to improve production and distribution.



Dr. Mishra concluded by thanking all participants and reaffirming the government's commitment to the growth of Nepal's potato sector. (*Details in annexure*)

Final Closing Remarks by Dr. Hari Bahadur KC, Chairperson of the Closing Session and Director, Department of Agriculture



Dr. Hari Bahadur KC, concluding the whole day Potato Summit 2024 with the Inaugural Session in the morning, three plenary Panel Discussions in the day, and closing session in the evening, officially closed the summit, expressing gratitude to MoALD, NICCI and FAO N epal for organizing a highly successful event. He highlighted the importance of documenting the key discussions and recommendations, suggesting that a report be compiled and shared with local and national authorities to guide future policies.

He also proposed that FAO Nepal lead the effort in

publishing a book on Nepal's potato farming history and development, which would serve as a valuable resource for policymakers and researchers.



Dr. KC thanked all farmers, industry leaders, researchers, and government representatives for their participation and expressed hope that the discussions would lead to meaningful progress in Nepal's potato sector.

Looking Ahead: The Road to Potato Summit 2025

As the First Potato Summit 2024 concluded, participants expressed a shared commitment to furthering Nepal's potato sector. The event laid the foundation for continued collaboration, research, and policy development in the years ahead.

With a vision for self-sufficiency, commercialization, and global market integration, the organizers announced their plans to host Potato Summit 2025, where stakeholders will reconvene to assess progress and set new goals for Nepal's potato industry.

With strengthened partnerships and strategic initiatives, Nepal is on the path to becoming a regional leader in potato processing and exports, ensuring long-term sustainability and economic growth.



Annexure - A (Speeches and Remarks)

Welcome Speech by Ms. Shreejana Rana

Namaskar and Good morning to everyone.

Nepal-India Chamber of Commerce and Industry (NICCI) jointly with Ministry of Agriculture and Livestock Development and Food and Agriculture Organization of Nepal (FAO-Nepal) to celebrate May 30, 2024 as International Potato Day declared globally by Food and Agriculture Organization (WFO). In collaboration with Krishi Bikas Bank Limited, which has been playing a leading role in the development of agriculture in Nepal for the past 56 years through investment in agriculture, we are going to celebrate the first Potato Summit 2024 in Nepal. We are proud to welcome you. This program brought success to those who gave their valuable time to be nurtured by Honorable Agriculture and Animal Development Minister Ms. Jwala Kumari Sah, Mayor of Panchkhal Municipality Mr. Mahesh Kharel, Secretary of the Ministry of Agriculture and Animal Development Dr. Deepak Kumar Kharel and Dr. Rajendra Prasad Mishra, Industry, Commerce and Dr. Dinesh Kumar Ghimire, Secretary, Ministry of Supply, Ms. Savanam, Joint Secretary, Ministry of Agriculture and Animal Development Shivakoti and Keynote Speaker Ms. Januka Pandit, Dr. Vinod Sah, Executive Director, FAO-Nepal, Dr. Hari Bahadur K. C., Director General, Agriculture Department along with Krishi Vikas Bank Ltd. Chief General Manager of Nepal-India Industry Commerce Association Mr. Babukaji Thapa, official of Nepal-India Industry Commerce Association, working committee member, President of Biratnagar and Birgunj Chapter and working committee members, executive head and representative of Yes Association member establishment, all the dignitaries, ladies and gentlemen and journalists present at the important program. Friends, I extend a hearty welcome to you.

We have a vision for any program, but without your support and participation to realize it, no program is successful, that's why you all participated here today. As such a big event is our first time, I would like to wish for its success. I would also like to welcome Mr. Suman Sekhar, he is on his way. We also have with us Mr. Ken Shimizu, Country Representative of FAO for Bhutan and Nepal, Mr. Nripendra Kumar Jha, Chief Executive Officer and Mr. Samip Kumar Das, Head of Channel Sales, both from Techno Agri-Science Limited from India, Ms. Monika Thotova, Senior Economist at Markets and Trade Division of the Food and Agriculture Organization of the United Nation to this first Potato Summit 2024 in Nepal.

For today's summit, we are happy to hold this program with the support of the Federation of Nepal Industry and Commerce/Agricultural Enterprises Association, Confederation of Nepal Industry, Nepal Chamber of Commerce and other leading industrial and commercial organizations. I would like to welcome and congratulate all the concerned organizations and dignitaries for taking such an excellent initiative for the upliftment of our economy.

We all know that the economy of Nepal is mainly based on agriculture. Nepal has been a unique country where different types of crops can be grown due to the highly fertile land and all types of climate found in the world from the northern to the southern regions of the country. We have discussed these possibilities in many forums regarding the fact that Nepal has been a land of high value agriculture along with our economically comparative advantage sectors such as hydropower and tourism, manufacturing and service sectors, now is the time to realize these discussions. We are gathered here today to focus on the crops that are vital to our agricultural sector and food security. The potato is the world's third most important food crop after rice and wheat in terms of human consumption, reaching the kitchens of more than a billion

people worldwide, from poor to wealthy families, and has become an integral part of our diets and agricultural practices.

Agriculture takes a very big role in Nepal's Economy and it is also connected to tourism because tourism is another area of economy for the country. So, what we feel is agriculture is something that Nepal has to relay stress. Climatically Nepal is really good for agriculture. Unfortunately, due to the technology we have been really left behind and also policies that we need to really work on. And now that we have our honorable minister with us and we know that she will push in all the policies to make sure that agriculture advances in Nepal. Especially potato, after rice and wheat, potato is one food that goes whether it's a poor household or a rich house hold in every kitchen potato is there. It is known to be a very stable diet. So this is the reason why in Nepal, agriculture has to be given a priority from the government. At the same time, the citizens of Nepal have to also stress on enhancing agriculture in Nepal.

Historically, potatoes were brought to Nepal for experimental purposes in the early 20th century. Due to our favorable agricultural climate and growing demand, potato cultivation has gradually picked up pace and in recent years, both potato production and potato cultivation areas have grown significantly. We understand that efforts to establish a potato super zone have further increased production. Challenges such as potato production in Nepal, potato cultivation area, potato productivity in Nepal compared to neighboring countries, storage techniques, access to quality seeds, training and infrastructure for farmers, pest infestation, limited access to markets, and price fluctuations are important for food security, rural livelihoods and economic growth in Nepal. Farmers, researchers, agricultural experts, scientists, policy makers in various areas of Nepal regarding the technical and economic aspects related to agriculture such as contributions, those brought from the neighboring country India. Through discussions with experts' experience and technical knowledge, and presentations from agricultural and potato-related economists, we hope to increase the sustainability and competitiveness of the potato sector, as well as improve our productivity and quality by focusing on promoting organic farming practices while also taking into account public health.

It appears that potato production is on the rise, which is very encouraging for agriculture in Nepal. However, we still face challenges related to technology, storage, quality seeds, and training. Fortunately, this summit brings together speakers and experts who will share insights on the latest technological advancements that can undoubtedly benefit us. Training also remains a critical factor. I believe that by looking at our neighboring country and adopting best practices from other nations, we can learn valuable lessons and find ways to enhance potato farming in Nepal.

The main objective of this potato summit is to share knowledge, promote innovation and address challenges faced by stakeholders in the potato industry in Nepal. Besides, leaving their fertile fields uncultivated, thousands of Nepali youths have migrated abroad in search of employment in unfamiliar lands. During our discussion today, through your valuable comments and various technical sessions, how can we create an environment that encourages our youth to start their own farming in Nepal, which will further increase agricultural production and productivity, including potatoes, in the country. Mass Contract Farming is another area that we should explore after learning from the success achieved by the Indian state of Sikkim in organic farming practices. Apart from potatoes, Nepal has comparatively benefited in the production of quality fruits, vegetables, spices and dry fruits. Despite these positive aspects, our agricultural sector is facing the challenge of youth migration, with many young people looking for better

job opportunities abroad. Today's conference will become more meaningful if those young people can be able to do something in their own country, in the midst of their families.

We have discussed the issue of youth migration, which is a significant challenge in Nepal. Agriculture, however, offers a potential solution to encourage the youth to remain in the country, live with their families, and still achieve economic empowerment. This is an aspect we must emphasize. In recent times, I have observed that the youth have recognized the potential of agriculture and take pride in locally grown products. There is growing awareness in Nepal about the high quality of our food, vegetables, and spices. What remains now is to explore how we can bring in expert knowledge and advanced technology to further enhance agriculture in Nepal and pave the way for its future growth.

The conference included keynote presentations by experts, panel discussions involving agro-based industrialists, policy makers and researchers, technical sessions and workshops focusing on practical solutions and best practices, poster presentations and information on innovative products, services and research findings and exhibition of samples of various potato varieties available in Nepal. Sustainable potato farming practices, technological developments in potato cultivation and processing, market trends and for potato growers and traders through networking sessions to facilitate collaboration and partnerships among participants. Opportunities, challenges and solutions of pest and disease management, value addition, diversification in the potato value chain, including covering a wide range of topics related to the potato industry are believed to help the appropriate regulator in policy making. I am confident that today's Potato Summit will provide a unique platform to address the evolving needs and opportunities of the potato sector in Nepal.

What we can see and learn from this summit is from the experts that are present here. From their presentations, we can learn about our strengths and what are our gaps. Looking at that, this potato summit is going to be an opportunity and an eye opener to many Nepalese people who are in agriculture that there is a huge potential in Nepal.

This program was completed unprecedentedly by Government of Nepal, Ministry of Agriculture and Animal Development, Department of Agriculture, Food and Agriculture Organization-Nepal (FAO-Nepal), Agricultural Development Bank Limited, Surya Nepal Pvt. Ltd., Salt Trading Corporation Limited, Nabil Bank Limited., NMB Bank Limited, Global IME Bank Limited, Chaudhary Group, First Choice Foods Pvt. Ltd., NLG Insurance Company limited, Muktinath Krishi Company Limited, Innovative Solutions Pvt. Ltd., Dabur Nepal Pvt. Ltd., Agro Enterprise Centre/FNCCI, Support and Collaboration to Women Entrepreneurs Association of Nepal (WEAN) and Event Manager 3-S, Yes Nepal-India Industry Commerce Association Small, Small and Medium Enterprises Committee (M/SME Committee) Today's first Potato Summit (Potato Summit 2024) has come true due to the important role of its coordinator Mrs. Sushma Sharma, the active secretariat of the RSS and the active secretariat.

I really want to thank and appreciate Ms. Sushma Sharma who is M/SME Committee chair in Nepal – India Chamber of Commerce and Industry. People can have vision but it's the implementation this summit you have worked around the clock and I really appreciate your hard work.

Finally, we warmly welcome all of you to this program, let us all make this potato summit great and successful.

Keynote Speech (Presentation) by Mr. NK Jha, CEO-Technico Agriscience Limited, India

Honorable Agriculture Minister, distinguished dignitaries, industry colleagues, and my dear farmer friends, a very good morning to all of you.

It is a great pleasure to be here today, and I would like to begin by congratulating each and every one of you on the occasion of International Potato Day, which we are celebrating worldwide. Before I delve into the details of my presentation, I want to take a moment to express my sincere appreciation and congratulations to the Nepal – India Chamber of Commerce and Industry for organizing such an insightful and timely workshop or summit. The timing of this event couldn't have been more appropriate, as the world has already recognized the potato as a food of the future.

Now, why do I say that potato is the food for the future? I will explain in more detail in the upcoming slides. Potato, as a crop, holds immense potential to address global challenges such as food and nutrition security. This remarkable crop is packed with nutritional value and is equipped with all the attributes necessary to sustain mankind across the world.

However, as we all know, the history of potato has not always been smooth. In fact, it has threatened the existence of mankind on more than one occasion, as seen during events like the Great Irish Famine and the Bengal Famine. These incidents were caused by potato-related crises, underscoring the importance of this crop. In light of this, it is high time that the global community has recognized and declared potato as a vital food source for the future.

Just to give you a brief snapshot of its importance, potato is the world's fourth-largest crop, with global production reaching approximately 375 million metric tons. Asia, in particular, contributes more than 50% of this total. In the future, potato production is expected to grow at a faster rate compared to other major crops such as wheat, rice, and maize, with an estimated global growth rate of 3.47%, whereas most cereal crops are growing at a much slower pace.

Moreover, potatoes are used in a wide range of industrial products, from potato powder (also known as flakes) to chips, French fries, starch, and even vodka and beer. This crop is not only critical in feeding people but also plays a significant role in industrial applications.

However, despite its importance, potato has long been victim to many myths. For instance, people often believe that eating too many potatoes can lead to obesity, high blood sugar, and cholesterol levels. In reality, these are just myths. Potato is a wholesome food with immense nutritional benefits. To dispel this myth, let me share an interesting story. Chris Voigt, the Director of the Washington Potato Commission, ate nothing but potatoes for 60 consecutive days. At the end of this period, he lost 21 pounds, his cholesterol levels dropped by 67 points, and his blood sugar and essential nutrients such as protein, calcium, and iron all improved. This speaks volumes about the nutritional value of this crop.

Now, let me share the experience of India and the potato revolution that has taken place there. The Portuguese introduced potato to India in 1778, bringing it from the western and eastern coasts. Over time, it gained popularity, and in 1935, the Indian government recognized the potential of this crop and established a potato breeding station under the Indian Agricultural Research Institute (IARI) in Shimla. In

1949, the government set up the Central Potato Research Institute (CPRI) in Bihar to cater to the Indo-Gangetic Plain, where potato cultivation was thriving.

India's government quickly realized the need for breeding new potato varieties to improve yields and quality. Since then, CPRI has released over 65 successful varieties suitable for different climates and markets. Today, India is the second-largest producer of potatoes in the world, with an annual production of around 60 million metric tons, India ranking second in the world in terms of potato trade as well.

The evolution of potato farming in India has been supported by technological advancements. With the introduction of new seed varieties and increased mechanization, the productivity of Indian potato farmers has increased dramatically. From being a net importer, India is now a net exporter of potatoes and potato products such as French fries, chips, and potato starch.

In the past two decades, companies like Technico have played a pivotal role in transforming India's potato industry. From the early days of potato cultivation in home gardens, we now see a thriving industry with advanced farming techniques and increased yields. By partnering with the government and private sector, Technico has helped to improve seed quality, implement new technologies, and expand the processing industry.

Looking ahead, the potato industry in India is poised for further growth. With the global potato seed market expected to reach 4 lakh tons and a value of Rs. 900 crore, we are confident that continued innovation, research, and collaboration will drive the industry forward.

In conclusion, I hope today's discussions will lead to greater awareness and understanding of the importance of potato farming and processing, not just in India, but in Nepal as well. Together, we can work towards a future where potato plays a central role in ensuring global food and nutrition security. Thankyou

Remarks by Mr. Ken Shimizu, Country Representative of FAO for Bhutan and Nepal

Good morning and Namaste.

I would like to acknowledge the chief of this program, Dr. Deepak Kumar Kharal, the Secretary of the Ministry of Agriculture and Livestock Development, our chief guest, the Honorable Minister Mrs. Jwala Kumari Sah, Minister for Agriculture and Livestock Development, Mrs. Shreejana Rana, the President of the Nepal-India Chamber of Commerce and Industry, Mr. Suman Sekhar, the First Secretary from the Embassy of India, and all the distinguished dignitaries from the government, private sectors, financial institutions, media representatives, and ladies and gentlemen.

On behalf of the Food and Agriculture Organization of the United Nations (FAO), I would like to thank you all for providing me with the opportunity to speak at this very important event. I would also like to take this opportunity to congratulate and thank our partners, the Ministry of Agriculture and Livestock Development, and of course the Nepal-India Chamber of Commerce and Industry, for your collaboration, partnership, and support in successfully organizing this milestone summit.

I would also like to extend my thanks to all the participants, moderators, panelists, resource persons, and presenters for your insightful contributions.

On behalf of FAO, I would like to warmly welcome the decision of the United Nations General Assembly to designate the 30th of May as the International Day of Potato. 2024 marks the first year of this designation, with the theme *Harvesting Diversity and Feeding Hope*. And, as all of my previous speakers have mentioned, what is not to like about potatoes?

Potatoes are a very nutritious crop. They can be grown in various agricultural conditions with minimal inputs—less land, less water—and they are genetically diverse. Potatoes are also highly productive, making them a climate-friendly crop. But they are also contributing to poverty alleviation and income generation. In the face of the challenges posed by climate change, environmental pollution, and the projected increase in global population, which will lead to greater demand for food, fertilizers, and agricultural inputs, the importance of a climate-friendly, nutritious, and income-generating crop like potatoes cannot be overstated.

However, as we know, there are challenges. Potato production and cultivation are affected by viral and bacterial diseases. There are also weaknesses in the value chain, such as the limited availability of quality seeds, as well as issues in storage, processing, and marketing. To address these challenges, we need increased investment to strengthen the value chain.

I am encouraged to see that many private companies, along with the Nepal-India Chamber of Commerce and Industry, are taking a leading role in organizing this event. FAO Nepal has had the pleasure of working with the Government of Nepal to develop an investment plan focused on strengthening the agricultural value chain for highland potatoes. We are looking to increase investments in tissue culture labs for the production of quality seeds, in storage facilities, processing, and marketing. Additionally, the Nepal potato brand can be enhanced through the introduction of geographical indications.

In fact, we are also supporting the Government of Nepal to establish a national geographical indication system, which is coupled with environmental sustainability. This will enhance the value of the wonderful Nepali potato brand, with the potential for export and further contributions to poverty alleviation and enhanced food security.

Once again, I would like to congratulate the Ministry of Agriculture and Livestock Development and the Nepal-India Chamber of Commerce and Industry for your wonderful efforts in organizing this milestone event. FAO remains committed to supporting and working with all of you to strengthen the agricultural value chain development for potatoes in Nepal.

I wish you all a very fruitful summit.

Inaugural Remarks by Ms. Jwala Kumari Sah, Honorable Minister for Agriculture and Livestock Development

Good morning, distinguished guests, ladies and gentlemen.

I would like to begin by expressing my deepest gratitude to all of you for your presence here today at the Potato Summit 2024. It is truly an honor to be part of this significant event, which highlights the tremendous potential of potato cultivation in Nepal. I would like to acknowledge and thank Mrs. Shreejana Rana, President of the Nepal-India Chamber of Commerce and Industry and Mr. Ken Shimizu from the Food and Agriculture Organization for partnering with the Ministry of Agriculture and Livestock Development, as well as the various dignitaries present today, including Mr. Deepak Kumar Kharal, Secretary of the Ministry, and Mr. Suman Sekhar, First Secretary at the Embassy of India.

I also want to extend my heartfelt appreciation to all the participants for their valuable contributions, which will undoubtedly make a significant impact on the future of potato farming in Nepal. The insights shared by the previous speakers, including Mr. NK Jha, Ms. Shreejana Rana, and Mr. Ken Shimizu, have highlighted the immense potential of potatoes as a vital crop for our country. Their remarks reflect our collective commitment to advancing agriculture and ensuring food security for all.

As Minister for Agriculture and Livestock Development, I am deeply passionate about the agricultural sector and its potential to bring Nepal towards self-reliance. To that end, I am pleased to share our policy initiative, the *Agricultural Investment Decade*, which will span from 2081 to 2091 in the Nepali calendar. This initiative is designed to provide crucial funding for agricultural production and investment, empowering farmers and fostering improved agricultural practices across the country. Importantly, this initiative aims to encourage young people to pursue agriculture as a career, ensuring a sustainable and prosperous future for Nepal's agricultural community.

One of the key focus areas of this initiative is the promotion of potato cultivation across all seven provinces of Nepal. Currently, Nepal produces potatoes on approximately 98,000 hectares of land, yielding about 34 lakhs and 11 thousand metric tons of potatoes. I am particularly excited about the wide variety of potatoes grown in our country, including the popular red potatoes and Seto Alu, which are loved for their delicious taste and are widely consumed across Nepal. Potatoes are an essential part of Nepalese cuisine, found in households, hotels, and restaurants, leading to a growing demand for this versatile crop.

In an effort to enhance potato production, the Ministry, through the Prime Minister's Agriculture Project, has designated 20 zones and 2 super zones across Nepal. This initiative is part of a broader plan to boost potato farming, with the ultimate goal of making Nepal self-sufficient in potato production. I encourage all of you to come together and support this vision, as we aim to increase production, meet domestic consumption needs, and unlock the export potential of Nepali potato products, including chips.

However, as we look to expand potato farming, we must also acknowledge the challenges faced by farmers, particularly the issues of diseases and infections that can affect potato crops. It is crucial that we collaborate with researchers, experts, and stakeholders to address these challenges and ensure the health and productivity of our potato crops in the years to come.

I also want to touch on the nutritional value of potatoes. While they are sometimes associated with high sugar content, I want to emphasize that potatoes are an incredibly nutritious food when consumed in moderation. They are a rich source of vitamins, minerals, and energy, and they play a key role in ensuring food security for our people.

In conclusion, I want to reiterate the importance of collective efforts to create a sustainable and thriving agricultural environment in Nepal. The initiatives discussed at this summit have the potential to significantly increase potato production in Nepal, and I fully support the steps being taken in this direction. I wish this summit great success and look forward to the positive outcomes that will emerge from our collective efforts.

Together, I believe we can build a prosperous future for Nepali potato farming, enhance our export market, and make Nepal self-sufficient in potato production.

Thank you very much, and I wish you all a fruitful and successful summit.

Vote of Thanks Delivered by Mrs. Sushama Sharma at the First Potato Summit 2024

Good afternoon, distinguished guests, esteemed colleagues, and all the participants.

It is my honor and privilege to deliver the vote of thanks on behalf of the organizing team for the First Potato Summit 2024. I would like to begin by acknowledging and expressing my deepest gratitude to the dignitaries who have graced us with their presence today.

First and foremost, I would like to thank our Chief of the Program, Dr. Deepak Kumar Kharal, the Secretary of the Ministry of Agriculture and Livestock Development, for his invaluable support and leadership. A special thank you goes to our Chief Guest, Honorable Minister Ms. Jwala Kumari Sah, the Minister for Agriculture and Livestock Development, for her inspiring address and unwavering commitment to the agricultural sector.

We are also grateful to Mr. Suman Sekhar, the First Secretary from the Embassy of India, and Ms. Shreejana Rana, President of the Nepal-India Chamber of Commerce and Industry (NICCI), for their continued support in making this summit a success. I would also like to acknowledge the presence of several other distinguished dignitaries who have contributed to the success of this summit, especially those from the government, private sector, and financial institutions.

This summit coincided with the celebration of *International Potato Day* on May 30, 2024, as declared by the Food and Agriculture Organization (FAO), and we are proud to have hosted such an important event. The discussions, insights, and experiences shared here today have been invaluable, and I sincerely appreciate all the efforts made by our panelists, moderators, and presenters.

I extend a special thank you to the Honorable Agriculture and Animal Development Minister Ms. Jwala Kumari Sah for her strong commitment to advancing Nepal's agricultural goals, and to Mayor of Panchkhal Municipality Mr. Mahesh Kharel, Secretary Dr. Deepak Kumar Kharal, Dr. Rajendra Prasad Mishra and other government representatives who played a key role in this summit.

I would also like to express our heartfelt thanks to Mr. Ken Shimizu, Country Representative of FAO for Bhutan and Nepal, whose presence and insights have been a great source of inspiration for all of us today. Furthermore, I would like to acknowledge the contributions of farmers from Mustang, Panchkhal, Kapilvastu, and Parasi, who shared their invaluable experiences and knowledge, enriching our discussions. Their involvement is a reminder of the hard work and dedication required to achieve the goals set for the agricultural sector in Nepal.

We are also deeply grateful to the organizations and sponsors that have supported this summit, including the Government of Nepal, FAO-Nepal, Agricultural Development Bank Limited, Surya Nepal Pvt. Ltd., Salt Trading Corporation Limited, and several other banks and organizations. Your generous support has been crucial in making this event possible. Special thanks also go to the Federation the Nepal Women Entrepreneurs Association (WEAN) for their active participation.

Lastly, I would like to express my heartfelt appreciation for the hard work and dedication of the event planning and organizing team, particularly Mr. Dumbar Khanal, President of Nepal-India Chamber of

Commerce and Industry, and my team at NICCI, FAO Nepal, and all those who worked tirelessly behind the scenes to bring this summit to life. The success of this event is a collective achievement, and it is a testament to the strength of our partnerships and shared goals.

As we conclude inaugural proceedings, I would like to reiterate the importance of our collective efforts in making Nepal self-sufficient in potato production. I request all the participants for your active participation in the upcoming three panel discussions with value chains of potato and related agenda starting after a short break after concluding observation of the opening remarks by the Secretary of Ministry of Agriculture and Livestock Development of Nepal. I am confident that the insights and discussions shared here today will play a vital role in realizing this vision.

Thank you once again to everyone for your invaluable contributions. I wish you all the best, and I look forward to our continued collaboration for the growth and prosperity of Nepal's agricultural sector.

Thank you.

Closing Remarks of Inaugural session by Mr. Deepak Kumar Kharal at the First Potato Summit 2024

Good afternoon, esteemed guests, distinguished dignitaries, colleagues, and all the participants.

It is both an honor and a privilege for me to deliver the closing remarks at the First Potato Summit 2024. I would like to extend a warm welcome to all of you who have graced us with your presence today. A special thank you to our Chief Guest, Honorable Minister for Agriculture and Livestock Development, and to all the dignitaries, including Mr. Ken Shimizu from FAO Bhutan and Nepal, Mr. Suman Sekhar from the Indian Embassy, Ms. Shreejana Rana, the Joint Secretaries of the Government of Nepal, heads of various departments, leading figures from associations, as well as the farmers, media, and all the guests who have made this summit a success.

Today marks a significant milestone as we hold the first-ever Potato Summit in Nepal, which has provided a much-needed platform to discuss various aspects of the potato industry—ranging from production to breeding, from identifying challenges to devising strategies for overcoming them. It is evident that this summit has been a vital step toward understanding the technical, legal, and operational elements that will contribute to greater productivity in the potato sector. We have learned much today, and these insights will surely serve as a roadmap to improve and expand potato cultivation in Nepal.

I would like to share a Nepali saying with you all: "Talu ma aalu fulyo," which signifies something positive. I hope today's summit will indeed have a positive impact on the future of farming in Nepal and will inspire growth in the potato sector. While potatoes have sometimes been humorously linked with failure in Nepali culture, today we've shifted our focus to their potential to bring about positive change and growth in Nepal's agricultural future.

We've also acknowledged some of the challenges faced by the potato industry, such as the underutilization of arable land. A large portion of Nepal's land remains barren, and this is something that needs to be addressed. One-fourth of our land is not currently used for agriculture, and we must work toward making better use of it for potato cultivation. Additionally, issues such as crop damage from monkeys were brought up, and I sincerely hope that the technical sessions we have scheduled will provide us with valuable solutions to these challenges—ensuring that we have higher productivity and fewer crop infections.

Potatoes are not just a staple crop; they are also strategic for Nepal's agricultural future. The government is dedicated to achieving self-sufficiency in potato production, and this summit is a critical step toward that goal. We are thankful to all the farmers for their tireless efforts in potato cultivation, and I hope the discussions and knowledge shared during this summit will inspire them to take their practices to the next level.

In conclusion, I would like to express my sincere gratitude to all the stakeholders—businesses, researchers, government agencies, financial institutions, and development partners—who are working tirelessly for the advancement of the potato industry. Your contributions are invaluable, and together we will build a more robust and sustainable potato sector in Nepal.

I want to extend my heartfelt thanks to our dedicated farmers for their passion and commitment to potato farming. I am confident that the solutions and insights discussed here will help them improve their practices and increase their productivity.

Once again, thank you to everyone who has made this summit possible, and I look forward to continued collaboration to ensure a prosperous future for Nepal's potato industry.

With that, I wish you all the very best and thank you for your time and participation.

Thank you.

${\it Glimpses~of~the~First~Potato~Summit, 2024, contd...}$

























Closing Session Presentations and Speeches

Keynote Speech (Presentation) on - Current Status of Potato in Nepal, Gaps and Way Forward – MoALD, GoN perspectives, by Ms. Januka Pandit, Joint Secretary, MoLAD

Respected President of the Potato Summit 2024, Director General of the Department of Agriculture, Secretary of the Ministry of Agriculture and Livestock Development, distinguished guests, and all esteemed participants, good morning.

I am Januka Pandit, representing the National Potato and Vegetable Spice Crop Development Center. It is a great honor to be here today at the Potato Summit 2024 to present on the topic "Current Status of Potato in Nepal, Gaps, and Way Forward."

First, I would like to extend my sincere gratitude to the Ministry of Agriculture and Livestock Development (MOALD), FAO Nepal, and NICCI for organizing this important event. I also thank all the supporters, volunteers, and everyone involved in making this program a success within such a short time. With that, let me begin my presentation.

Current Status of Potato in Nepal

Potato is one of the most important crops in Nepal and plays a crucial role in food security and nutrition. It is consumed as a vegetable in the Terai and mid-hills, while in the high hills, it is a staple food. In terms of importance, it ranks sixth in cultivated area, second in total production, and first in productivity among all crops in Nepal. The potato sector contributes 6.35% to Nepal's Agricultural Gross Domestic Product (AGDP).

We are fortunate that, due to Nepal's diverse climatic conditions, potatoes can be cultivated throughout the year in different regions—from the Terai to the mid-hills and high hills. According to FAO data, Nepal's per capita potato consumption is 111.8 kg per year. This crop is nutritionally valuable, environmentally sustainable, and requires less water compared to rice and maize.

The Government of Nepal has prioritized potato production by identifying 166 production pockets across the country. We also have a rich diversity of local potato varieties, including Kathmandu Local, Jumli Local, Bajhang Local, Tharu Local, and Bung Local, which hold great commercial potential.

Looking at global statistics, the world's average potato productivity is 20.01 metric tons per hectare. Among Asian countries, Nepal ranks fourth in productivity, with 17.20 metric tons per hectare, while Pakistan leads the region. Over the past 20 years, Nepal's cultivation area has grown by 1.85% annually, production by 4.31%, and productivity by 2.38%.

If we compare production across different regions, the hill region leads in both area coverage (46.07%) and total production (47.81%). At the provincial level, Koshi Province has the highest cultivated area, while Bagmati Province leads in both production and productivity, with 19.57 metric tons per hectare.

Seed Production and Trade

In terms of seed production, Nepal has seven Pre-Basic Seed (PBS) production organizations—two in the government sector and five in the private sector. The annual demand for PBS is between 0.8 to 1 million, while production is around 0.8 million, with a total capacity of 1.4 million across all labs.

Regarding trade, Nepal has been exporting potatoes to countries such as Australia, Japan, Italy, and Seychelles, primarily for industrial uses like potato flour, powder, and frozen French fries. However, our largest import partner remains India, followed by China, Indonesia, and Bangladesh. Imports mostly consist of seed potatoes, frozen potatoes, potato flakes, and chips. Data from FAO spanning 2005 to 2022 shows that Nepal's potato imports have been increasing, reinforcing the need for greater self-sufficiency.

Government Policies and Institutional Support

The Government of Nepal has implemented various policies and legal frameworks to support potato farming, including:

- Right to Food and Food Sovereignty Act
- Plant Quarantine and Protection Regulation
- Seed Act 2045 and Seed Certification Directives 2017
- Potato Pre-Basic (PBS) Seed Production and Certification Standard, 2022
- National Agriculture Policy, 2004 & Agriculture Development Strategy

Additionally, various government institutions such as MOALD, Nepal Agricultural Research Council (NARC), and the Seed Quality Control Center (SQCC) are working at the federal level to promote potato development. Provincial and local governments have also introduced agricultural programs to support farmers.

The National Center for Potato, Vegetables, and Spice Crops Development (NCPVSCD) operates four satellite farms dedicated to improving seed quality, technical training, and research. Furthermore, the National Potato Research Program (NPRM) is actively involved in variety improvement, disease and pest management, organic production, and post-harvest technology research.

Challenges in the Potato Sector

Despite its potential, Nepal's potato industry faces several challenges:

- 1. Seed Production and Storage
 - Lack of storage facilities for pre-basic seed (PBS).
 - No insurance coverage for potatoes stored in cold storage.
 - Mismatch between seed supply and demand.
- 2. Processing and Value Addition
 - Deteriorating quality of True Potato Seed (TPS), leading to lower yields.
 - Lack of trained professionals for TPS and PBS production.
 - Limited infrastructure for potato processing and storage.
- 3. Land Utilization and Market Trends
 - Underutilization of suitable land in mid-hills and high-hills.
 - Increasing potato imports despite growing domestic production.

Opportunities and Way Forward

Despite these challenges, there are several opportunities to improve Nepal's potato sector and achieve self-sufficiency:

- 1. Expanding Cultivation Areas
 - Encourage potato farming in mid-hill and high-hill regions.
 - Leverage Nepal's twice-a-year cropping potential.
- 2. Strengthening Seed Supply Chains
 - Develop high-yield potato varieties for industrial use.
 - Enhance cold storage infrastructure and provide transport subsidies for farmers.
- 3. Value Addition and Market Expansion
 - Promote branding and marketing of Nepali potatoes.
 - Encourage industrial processing to produce potato-based products like chips, flour, and frozen fries.
- 4. Policy and Institutional Enhancements
 - Introduce insurance schemes for stored potatoes.
 - Increase investment in research, processing, and quality control.

Conclusion

As we discuss the future of potato farming in Nepal, it is crucial to focus on increasing productivity, expanding cultivation areas, and strengthening market linkages. If we aim for self-sufficiency, we must increase productivity to 18.50 metric tons per hectare and expand potato cultivation by an additional 14,957 hectares.

Additionally, we need insurance schemes for cold-stored potatoes, transport subsidies for farmers, and greater conservation of local potato varieties. Nepal must also expand branding and international marketing efforts to establish its potato industry on a global scale.

Today, as we gather here at the Potato Summit 2024, I would like to propose that May 30th be officially recognized as "Potato Day" in Nepal. This will create stronger forward and backward linkages for the industry and further promote collaboration among farmers, researchers, and policymakers.

With that, I conclude my presentation. Thank you.

Keynote Speech (Presentation) on Private Sector Engagement on Value Chain by Mr. Shyam Dhakal, Director, First Choice Foods Pvt. Ltd., Suddhodhan-4, Mainahiya, Rupandehi, Nepal during the Closing Session of the Potato Summit, 2024

Distinguished guests, esteemed panelists, and respected audience,

It is a pleasure to be here today to discuss the current state and future potential of potato processing and value addition in Nepal. Potatoes have always played a significant role in our agricultural sector, yet we continue to face challenges in seed production, storage infrastructure, processing technology, and market expansion. Today, I would like to highlight these areas, discuss the progress made so far, and propose potential solutions to drive self-sufficiency and economic growth in the potato industry.

Seed Production & Tissue Culture Labs

Nepal currently has seven private tissue culture labs, but only four are operational. Fortunately, these four labs are sufficient to meet our pre-basic seed production needs. If we expand our cultivation area to 190,000 hectares, we can generate 50-60% of our seeds from pre-basic seed production, significantly reducing our dependency on imports.

At present, seed production is mainly managed by seed producer groups and cooperatives. However, a critical issue is that the seed cycle is not being properly followed. While pre-basic seeds are available, they are not completing the necessary multiplication cycles to produce certified clean seeds. To address this, the government must provide a buy-back guarantee to seed producer groups and cooperatives. This will incentivize farmers to complete the seed cycle and ensure a steady supply of high-quality seeds, reducing reliance on small potatoes from table stock as seed material.

Cold Storage Infrastructure & Maintenance

In Nepal, there are approximately 9 to 10 dozen cold storage facilities. Based on capacity, these can be categorized into three types. While the existing infrastructure is sufficient for storing potatoes, fruits, and vegetables, the lack of proper temperature and humidity management limits their efficiency.

One of the biggest issues is that different crops require different storage conditions, yet we continue to store everything together. Seed potatoes and processing potatoes need distinct storage environments, including controlled temperature, humidity, and the use of sprout inhibitors. Currently, only two cold storage facilities—First Choice Food and one in Kapilvastu—use sprout inhibitors, making proper storage a significant challenge. Additionally, Nepal has around 100 rustic storage units, but only 50% are in use due to poor maintenance and management. If properly maintained, these storage units could play a crucial role in reducing post-harvest losses and ensuring year-round potato availability.

Modernizing Potato Processing & Varietal Development

Traditionally, potatoes in Nepal have been processed into products like Masyaura, Chana, and potato flour. However, with modern technology and innovation, we must focus on higher-value processed products such as:

- French fries
- Potato chips
- Crinkle cuts
- Potato wedges
- Potato flakes
- Potato starch

Companies like CG (Chaudhary Group) have already started expanding their potato-based product lines, showing significant potential in this sector.

To further improve processing efficiency, we have begun working on specific potato varieties suited for different processed products. This year, we are focusing on varieties for French fries production, with plans to introduce and expand production for other specialized varieties in the coming years. Some varieties from the Netherlands and India are currently under experimental cultivation, and we are developing production technologies to enhance yield and quality.

Transportation, Marketing & Economic Opportunities

A major challenge in the potato supply chain is the lack of refrigerated transport. As the demand for frozen potato products grows, we need refrigerated vehicles to maintain product quality during transportation. Additionally, to expand market access, we are planning to establish refrigeration outlets at key locations where frozen products are sold.

Currently, Nepal imports 8,000–10,000 tons of processed potato products annually, mainly frozen French fries and potato snacks. Furthermore, 350,000–400,000 tons of table potatoes are imported from India and Bhutan, amounting to 8 billion NPR annually. However, Nepal has a unique off-season production advantage, providing significant opportunities for exporting processed potato products.

Beyond economic benefits, potato processing can contribute to:

- Higher farmer incomes
- Job creation
- Market expansion and export potential
- Rural development and local economic growth

Private Sector Role in Value Addition

The private sector has been playing an active role in enhancing marketability and product diversification by:

- Extending shelf life through improved storage
- Enhancing nutrition and convenience
- Developing product innovation and quality improvement
- Branding and marketing efforts
- Optimizing supply chains
- Providing training and education to farmers and processors

These initiatives are crucial for improving Nepal's agro-processing industry and ensuring long-term sustainability in the potato sector.

Challenges & Proposed Solutions in Potato Processing

Despite these advancements, several challenges remain in the potato processing industry. The following key issues and their solutions need to be addressed:

- 1. Quality Raw Material Supply
 - o Challenge: Inconsistent supply of raw potatoes for processing.
 - o Solution: Identify key production hotspots and strengthen farmer-producer linkages.
- 2. Storage Problems & High Costs
 - o Challenge: Limited and expensive cold storage facilities.

- Solution: Develop low-cost storage solutions and improve maintenance of existing facilities.
- 3. Consumer Demand & High Product Costs
 - o Challenge: High costs of processed potato products, limiting consumer demand.
 - o Solution: Diversify product offerings and develop affordable pricing strategies.
- 4. Lack of Suitable Potato Varieties
 - o Challenge: Many existing varieties are not ideal for processing.
 - o Solution: Introduce and promote new high-yield processing varieties.
- 5. Health Concerns & High-Calorie Perception
 - o Challenge: Processed potato products are often perceived as unhealthy.
 - o Solution: Develop low-fat fortified potato products to address health concerns.

Policy Recommendations & Government Support

Despite having year-round potato production, active participation from farmers and cooperatives, and access to modern machinery and storage facilities, Nepal still imports a huge amount of potatoes from other countries. This raises an important question: Why are we not self-sufficient? I believe today's discussions at this Potato Summit will help us move closer to an answer.

To achieve self-sufficiency and sustainable growth, we need strong government support through:

- Soft loans with easy accessibility for potato processing industries.
- Subsidized interest rates and infrastructure development incentives.
- Electricity subsidies to lower production costs.
- Tax relief programs, such as tax exemptions and interest-free bank loans, to encourage investment and sectoral growth.

Conclusion

The potato industry in Nepal has tremendous potential for value addition, commercialization, and export growth. By addressing existing challenges in seed production, storage, processing, and market expansion, we can create a sustainable and competitive potato sector. Collaboration between government, private sector, farmers, and research institutions will be key in unlocking this potential.

With the right policies, investments, and technological advancements, I believe Nepal can significantly reduce its reliance on potato imports and become a regional leader in potato processing.

Thank you all for your time and attention.

Hand-in-Hand Initiative by FAO: A Collaborative Approach to Agricultural Investment – by Mr. Shankar Sapkota, Coordinator of FAO Nepal

Introduction

Mr. Shankar Sapkota delivered a presentation on the Hand-in-Hand Initiative, a global program launched by the Food and Agriculture Organization (FAO) to foster investment, business collaboration, and economic development in the agricultural sector. He emphasized the importance of creating an enabling environment for investment, particularly for new entrepreneurs and businesses, by addressing key constraints and linking investment opportunities with government policies.

Overview of the Hand-in-Hand Initiative

The Hand-in-Hand Initiative is a global FAO-led program aimed at enhancing business collaboration and facilitating agricultural investment. The initiative is currently implemented in 67 countries, including Nepal, in partnership with governments and the agricultural sector. To date, it has mobilized approximately \$3 billion in investments, significantly impacting the economies of participating nations. The initiative primarily focuses on modernization and mechanization in agriculture, along with livestock sector development, industrialization, and investment promotion. In Nepal, FAO has conducted detailed research on investment trends, concluding that both foreign and national investment opportunities are expanding in the agricultural sector.

Key Factors Enabling Investment in Agriculture

Mr. Sapkota outlined four essential factors necessary for attracting investment in Nepal's agricultural sector:

- 1. **Land Availability** Nepal possesses vast arable land, offering significant potential for commercial agriculture.
- 2. **Economically Active Population** A large segment of Nepal's workforce is engaged in agriculture, making labor readily available.
- 3. **Access to Quality Water** The country has abundant water resources, essential for irrigation and agricultural productivity.
- 4. **Energy Access** With increasing electrification and renewable energy development, Nepal is becoming more attractive for agricultural investment.

He emphasized that by effectively utilizing these four factors, Nepal can significantly boost agricultural investment and productivity. Furthermore, all investment plans must be aligned with government policies to ensure sustainable growth and national economic development.

FAO Nepal's Investment Focus Areas

FAO Nepal is currently focusing on specific agricultural products that hold high investment potential. These include:

- Large cardamom
- Timur (Sichuan pepper)
- Highland potato
- Pangasius fish farming

Extensive research is being conducted on these products to identify key investment needs, bottlenecks, risks, and mitigation strategies. The findings will be discussed with the Government of Nepal to formulate strategies that support investment growth.

Economic Analysis & Future Prospects

In addition to identifying investment priorities, FAO Nepal is also conducting economic analyses to assess market trends, return on investment, and risk factors in the agricultural sector. The Hand-in-Hand Initiative aims to connect investors with viable agricultural projects, ensuring that investment decisions are backed by data-driven insights and aligned with Nepal's broader economic policies.

Mr. Sapkota expressed optimism about the initiative's impact, stating that FAO Nepal, in collaboration with the Ministry of Agriculture and Livestock Development, is working on multiple investment projects under the Hand-in-Hand framework. He emphasized that the program has been successful due to strong government support and expects it to continue thriving in the future.

Call for Collaboration: The Decade of Agricultural Investment

In his concluding remarks, Mr. Sapkota stressed the importance of collaboration between all sectors to achieve sustainable agricultural growth. He highlighted the Government of Nepal's "Decade of Agricultural Investment" initiative and emphasized that private sector participation, government support, and FAO's expertise must come together to attract investment and foster innovation.

He urged stakeholders to work collectively to enhance investment opportunities, welcome new businesses and ventures, and drive agricultural transformation in Nepal.

Conclusion

Mr. Sapkota concluded his presentation by reaffirming FAO Nepal's commitment to supporting agricultural investment and business development through the Hand-in-Hand Initiative. He expressed confidence that with continued collaboration and strategic planning, Nepal's agricultural sector will achieve sustainable growth and economic resilience.

Following the presentation, the Emcee thanked Mr. Shankar Sapkota for his valuable insights and for shedding light on FAO's efforts to strengthen agricultural investment in Nepal.

Declaration and Recommendations of the Potato Summit Presented by Ms. Januka Pandit, Joint Secretary, Ministry of Agriculture and Livestock Development, Government of Nepal, and coordinating person on behalf of the Ministry for the Potato Summit, 2024 Organizing Committee.

In this meeting, distinguished guests, including the Speaker, Chief Guest, Secretary of the Ministry of Agriculture and Livestock Development, and former Minister, I would like to present the key recommendations derived from today's discussions. This declaration encompasses the insights and points discussed throughout the day, including the four keynote papers, which focused on the global scenario, the status of neighboring countries, Nepal's potato scenario, and the role of the private sector in Nepal's potato value chain. Additionally, there were three panel discussions on crucial topics such as seed and table value chains, innovation in potato processing, and policy environment.

Key Recommendations:

1. Seed Potato and Value Chain Development:

- **Seed Cycle Maintenance & Certification**: There is a pressing need to regulate the potato seed system. Currently, approximately 90% of seed potatoes come from informal systems, and it is vital to bring these under formal regulation.
- **Private Sector Investment**: The government should facilitate private sector investments in seed potato production. This will improve the quality and quantity of seed potatoes available in Nepal.
- **Geographical Indications**: Local landraces and specific potato varieties must be protected through geographical indications (GI).
- Matching Supply & Demand: The government should work towards matching the supply and demand for seed potatoes. Additionally, a focus on the minimum support price for seed potatoes should be maintained.

2. **Promotion and Subsidy Programs:**

- **Support for Table Potatoes**: Subsidized programs for table potato production, including transportation costs and cold storage facilities, should be introduced.
- **Barren Land Utilization**: Programs should be implemented to promote potato cultivation on barren lands, ensuring optimal use of available resources.

3. Research & Variety Development:

- **Support for Research Institutions**: Research by institutions like NAARC has been productive and should continue, focusing on new varieties that are suitable for processing, high production, and climate resilience.
- **Farmers' Knowledge Enhancement**: There is a need to bridge the knowledge gap for farmers through training and technical assistance, enabling them to increase productivity.

• **Technology & Mechanization**: Awareness about mechanization and modern farming technologies, including imports of high-tech solutions such as hydroponics, should be encouraged.

4. Marketing & Branding:

- **Branding Local Potatoes**: Local varieties such as Bajhang and Mudhey should be branded, and efforts should be made to standardize packaging, grading, and labeling to increase their market appeal.
- Supply Chain Management: Creating a structured supply chain for potatoes, involving proper grading, packaging, and distribution, will reduce production costs and benefit both farmers and consumers.
- **Year-Round Production**: Through better infrastructure and supply chain management, Nepal should aim to produce and deliver potatoes year-round.

5. Infrastructure and Policy Support:

- Subsidy and Irrigation: Policies to provide subsidies for infrastructure development, including
 cold storage and processing facilities, should be introduced. Likewise, improvements in irrigation
 facilities are necessary for consistent potato production.
- **Cold Storage & Seed Facilities**: The establishment and enhancement of seed storage facilities, processing plants, and seed laboratories should be prioritized.
- **Information Systems for Farmers**: An SMS-based information system should be set up to provide farmers with timely updates on climate change, pests, and diseases to prevent potential losses.

6. **Government Role in Support:**

- **Facilitation of Processing Sector**: The government should actively support the processing industry, including attracting foreign direct investment (FDI) for growth in the sector.
- **Minimum Support Price & Protection for Farmers**: The state must ensure minimum support prices for seed potatoes and create mechanisms to protect farmers' interests.
- **Youth Involvement in Potato Farming**: Efforts should be made to attract and motivate the younger generation to engage in potato farming through awareness programs and support.

7. Public-Private Cooperation Model:

• **Collaborative Approaches**: A Public-Private Cooperative Model should be adopted to foster collaboration between the government, private sector, and farmers. This model should facilitate both forward and backward linkages in the potato value chain.

• **Financial Support**: Soft loans should be made available to farmers for better production and productivity. Additionally, insurance for potatoes in cold storage should be introduced to mitigate risks.

8. Long-Term Strategic Vision:

• **Potato Strategy for 20 Years**: A long-term potato strategy (at least 20 years) should be developed to guide the sector's growth, including detailed plans for research, investment, marketing, and infrastructure development.

Conclusion:

As we conclude the Potato Summit, we call for immediate action on these recommendations to promote sustainable development in Nepal's potato sector. We emphasize the need for continued celebration of Potato Day annually, as well as an integrated approach involving all stakeholders in the potato value chain. The government, private sector, and international partners must collaborate for a prosperous and self-sufficient potato industry.

We urge all stakeholders to support the development of the potato sector, ensuring its future sustainability and growth.

Next Steps:

- We propose a follow-up event on **Potato Day** to take place annually in Nepal, continuing the momentum created during the summit.
- A focus on creating a **20-year strategy** for the potato industry to ensure its long-term development and prosperity.

Address by Mr. Umesh Shrestha, former Minister of State for Education, Science & Technology, Education and Agriculture Entrepreneur and Special Guest of the Closing Session

Mr. Umesh Shrestha shared his thoughts and experiences at the Potato Summit. He began by expressing his appreciation for the program and its focus on agricultural transformation in Nepal. Drawing from his own journey in education and entrepreneurship, he highlighted the vast opportunities available in the country and emphasized the need for better policies and strategic thinking to harness Nepal's potential.

Nepal's Untapped Potential & Policy Support

Reflecting on his personal journey, Mr. Shrestha mentioned that despite attending a government school, he eventually became a leader in private education. He compared Nepal to a chicken that lays golden eggs, signifying the country's immense opportunities. However, he stressed that these opportunities could only be realized through improved policies and forward-thinking leadership.

Sharing his experience in apple farming, he noted that the establishment of integrated farms had been highly successful, largely due to recent policy changes in the agricultural sector. He acknowledged the government's role in enabling these advancements and encouraged further policy reforms to support agricultural innovation.

Challenges in Agriculture & Required Reforms

While appreciating the potential in Nepal's agricultural sector, Mr. Shrestha also pointed out several key challenges that need urgent attention. He emphasized that budget allocation for agriculture remains low, which hinders progress. Furthermore, inefficient irrigation systems, lack of effective cold storage, and high dependency on imported raw materials have slowed down agricultural commercialization and growth.

To address these issues, he recommended:

- o Implementation of buy-back guarantees to ensure farmers have a secure market for their produce.
- o Strengthening supply chain and value chain systems to improve market access.
- Establishing a proper seed categorization system to enhance productivity.
- Encouraging integrated farming models for greater efficiency and sustainability.
- o Encouraging Investment & Private Sector Involvement

Mr. Shrestha strongly advocated for increased private sector involvement in agriculture. He suggested that large business houses, as well as individual investors, should actively participate in agricultural investments. He emphasized that commercialized farming through demonstrative effects would not only be productive but also highly profitable, allowing producers to sell their products at competitive prices with higher profit margins.

He reiterated the need for government support in promoting supply chain development, ensuring minimum value pricing for agricultural products, and strengthening value chain systems.

Conclusion: Moving Forward with a Positive Mindset

In his closing remarks, Mr. Shrestha emphasized that Nepal holds great potential for self-sufficiency and economic development. However, he urged collective action from the government, private sector, and individuals to drive change. He encouraged everyone to adopt a positive mindset, focus on solutions rather than problems, and work together toward national development.

He concluded his address by reaffirming his belief that through collaboration and progressive policies, Nepal can achieve agricultural transformation and long-term economic prosperity.

Remarks by Dr. Rajendra Prasad Mishra Secretary of the Ministry of Agriculture and Livestock Development (MOALD) and Chief Guest of the Closing Session.

Dr. Rajendra Prasad Mishra delivered his remarks as the Chief Guest at the summit. He began by extending his greetings to the chairperson, ministers, dignitaries, and attendees, acknowledging the efforts of organizers and supporters who played a crucial role in bringing the discussion on potato cultivation and processing to the forefront.

Significance of Potato in the Food Chain & Investment Potential

Dr. Mishra emphasized that potato is much more than just a crop, as it holds significant value in the global food chain and presents huge investment opportunities for the future. He urged individuals and businesses to consider investing in the potato sector, stating that the current time is ideal for such investments. He outlined several key areas for potential investment, including:

- Input supply and seed technology
- o Production and mechanization
- Value chain development and processing
- Marketing and branding

He highlighted that Nepal's diverse regional varieties of potatoes remain underutilized, and there is immense potential to market these unique types effectively.

Government's Role & Nepal's Agricultural Advantage

Dr. Mishra reassured that the government, along with local authorities, is actively working on promoting and marketing potatoes. He noted that Nepal has a unique advantage over other countries—the ability to cultivate and harvest potatoes year-round. This, he explained, gives Nepal a competitive edge in potato production, particularly in the highland potato segment, which is already gaining market demand. With the right technological interventions, he added, Nepal can further increase farmers' incomes and boost economic returns.

Need for Stronger Industry-Production Linkages

He stressed that the private sector plays a crucial role at every stage of the potato supply chain, from production to distribution. However, he pointed out that stronger integration between potato production and industrial processing is needed. He urged industries to communicate their production capacities, productivity requirements, and areas where government assistance is needed. By fostering better collaboration between industries and the government, he stated, Nepal can take a significant step toward self-sufficiency in potato production and processing.

Conclusion

Dr. Mishra concluded his remarks by reiterating that potato is not just a staple crop but an essential part of Nepal's agricultural and economic landscape. He expressed optimism about the future of potato farming and processing in Nepal, thanking all participants for their contributions to the summit.

Closing Remarks by Dr. Hari Bahadur KC, Director of Department of Agriculture, Ministry of Agriculture and Livestock Development and Chairperson of the Closing Session of the Potato Summit, 2024.

Mr. Hari Bahadur KC delivered the closing remarks at the Potato Summit on the International Day of Potato, addressing the Chief Guest, dignitaries, organizers, and attendees. He began by acknowledging the insightful discussions held throughout the day and expressed his appreciation for FAO Nepal and NICCI for organizing such a successful and impactful event.

Emphasizing the importance of documenting the key discussions and recommendations, he urged all responsible bodies to compile a concise report on the summit's proceedings. He suggested that this report be circulated to local and government authorities, as it would serve as a valuable resource for guiding policies and initiatives in the potato sector.

Furthermore, he proposed that FAO Nepal take the lead in publishing a book on the history and development of potato farming in Nepal. He believed that such a publication would be an important reference for policymakers, researchers, and farmers. To support this initiative, he requested FAO Nepal's assistance in both technical and financial aspects.

In conclusion, Mr. KC expressed his gratitude to all participants for their active engagement and patience throughout the event. He remarked that the success of the summit demonstrated the collective commitment to strengthening Nepal's potato industry and urged all stakeholders to continue working together for innovation, investment, and sustainable growth.

With these remarks, he thanked everyone once again and expressed his hope that the discussions and initiatives from the summit would lead to meaningful progress in the near future.

List of Participants and Attendees (Including Organizing Team)

S No.	Name	Designation	Organization
1	Mr. Dipak Kumar Kharal	Secretary	Ministry of Agriculture and Livestock Development
2	Dr. Hari Bahadur K.C	Director General	Department of Agriculture, MoALD
3	Mr. Rajendra Prasad Mishra	Secretary	Ministry of Agriculture and Livestock Development
4	Ms. Sabnam Shivakoti	Joint Secretary & Spokesperson	Ministry of Agriculture and Livestock Development
5	Mrs. Januka Pandit	Head (Joint Secretary - MoALD)	Rastriya Aalu Tarkari Tatha Masalabali Bikash Kendra
6	Mr. Keshab Man Singh	Director General	NICCI
7	Mr. Marshal Rathour	Dy. Director	NICCI
8	Mr. Nimesh Nepal	Head Accounts	NICCI
9	Mrs. Shreejana Rana	President	NICCI
10	Mr. Som Adhikari	Executive Member and Agro Entrepreneur	NICCI Biratnagar Chapter
11	Mr. Mukesh Upadhyay	Chapter President o Entrepreneur	NICCI Biratnagar Chapter
12	Mrs. Sushama Sharma	Execuitve Member & Convener - M/SME Committee	NICCI
13	Ms. Urmila Shrestha	Chief Executive Officer	NICCI Member, Salt Trading Corporation
14	Ms. Anjalita Bhusal	CSR Executive	NICCI Member Surya Nepal Pvt. Ltd.
15	Ms. Asmita Gautam	Partnership Specialist	Food and Agriculture Organization (Nepal)
16	Dr. Binod Shah	Assistant FAO Representative	Food and Agriculture Organization (Nepal)
17	Mr. Shankar Sapkota		Food and Agriculture Organization (Nepal)
18	Mr. Arun GC	Media Coordinator	Food and Agriculture Organization (Nepal)
19	Dr. Bhim Bahadur Khatri	Retired Sr. Scientist	Nepal Agricultural Research Council (NARC)
20	Dr. Sambhu Dhital	Potato Pathologist (ex senior scientist)	National Agricultural Research Council
21	Mr. Tika Bahadur Karki	Director	Bali Tatha Bagbani, NARC
22	Mr. Yub Raj Bhusal	Senior Scientist	Nepal Agricultural Research Council (NARC)
23	Mr. Babu Kaji Thapa PhD	Deputy General Manager	Agricultural Development Bank Nepal

S No.	Name	Designation	Organization
24	Dr. Bijay Prasad Rajbhandari (Prof.)	Chairman	Himalayan College of Agriculture Science and Technology (HICAST),
25	Dr. Bishnu Bhattarai	Head Agriculture Program	Himalayan College of Agriculture Science and Technology (HICAST)
26	Ms. Krish Rauniyar	Representative	Himalayan College of Agriculture Science and Technology (HICAST)
27	Mr. Rojan Karki	Representative	Himalayan College of Agriculture Science and Technology (HICAST)
28	Mr. Arjun Shrestha	Manager SE/SME	Nabil Bank Ltd.
29	Mr. Manoj Kumar Yadav	Manager Micro Finance & Sustainaible Banking	Nabil bank Ltd.
30	Ms.Mina Kumari Gurung	Farmer	Munaabazar, Pokhara
31	Mr.Sita Pandey	Farmer	Munaabazar, Kathmandu
32	Mr.Sri Ram Thapa	Farmer	Munaabazar, Pokhara
33	Mr.Yubraj Gurung	Farmer	Munaabazar, Kathmandu
34	Mr. Chudamani Bhattarai	Representative	PMAMP, PIU, Bhaktapur(Potato Zone)
35	Mr. Hikmat Kumar Shrestha	Information Officer	PMAMP
36	Mr. Jeet Bahadur Chand	Senior Agri Engineer	Prime Minister Agriculture Modernization Project(PMAMP)
37	Mr. Prakash Paudel	Representative	PMAMP , PIE , KAvre (Potato Zone)
38	Ms. Shrinu Kumari Jha	Plant Protection Officer	PMAMP, PIU
39	Mr. Badala Karmacharya	Representative	Mathureshwor Sana Kishan Krishi Sahakari
40	Mr. Ram Kumar Sunuwar	Member	Mathureshwor Sana Kishan Krishi Sahakari
41	Mr. Raman Kaji Suwal	Member	Mathureshwor Sana Kishan Krishi Sahakari
42	Mr.Shree Krishna Dhital	Member	Mathureshwor Sana Kishan Krishi Sahakari
43	Mr. NK Jha	Chief Executive Officer, Expert	Technico Agri Science Limited , India
44	Mr. Samip Kumar Das	Head of Channel Sales	Technico Agriscience Limited, India
45	Mr. Krishna Prasad Paudel	Executive Chairman	First Choice Foods Pvt. Ltd.
46	Mr. Shyam Prasad Dhakal	Agronomist	First Choice Foods Pvt. Ltd.,
47	Dr Ajay Sri Ratna Bajracharya	Head	Rastriya Kit Bigyan Anusandhan Kendra, Khumaltar
48	Dr. Nawaraj Khatiwada	Professor	

S No.	Name	Designation	Organization
49	Dr. Roshana Shrestha	Zoologist	Freelancer
50	Mr. Arjun Prasad Luitel	Director	G.seven agriculture pvt.ltd
51	Mr. Arun Kafle	Deputy Director	Department of Agriculture
52	Mr. Ashish Sharma	Managing Director	Agri Vastu Cold Storage, Kapilvastu
53	Mr. Bal Krishna Joshi	Head	Rastriya Krishi Aanubanshik Anusandhan Kendra
54	Mr. Bashant Chandra Marahatta	Representative	Seed Entrepreneurs Association of Nepal
55	Mr. Basudev Kaphle	Project Head	ASDP
56	Mr. Benu Prasad Prasai	Head	Beu Bijan Gunasthar Niyantran Kendra
57	Mr. Bhanu Bhakta Pokhrel	Head	Rastriya Bali Anusandhan Kendra, Khumaltar
58	Mr. Bharat Prasad Kandel	Project Head	RaniJamara
59	Mr. Bharat Raj Dhakal	Managing Director	Muktinath Krishi Company. Ltd.
60	Mr. Bhojraj Sapkota	Head	Plant Quarantine and Pesticide Management Centre
61	Mr. Bhuwan K.C	owner	Kathmandu Organica
62	Mr. Bishnu Shrestha	Representative	Bhotekoshi Business Group
63	Mr. Bivekanand Mahat	Agri Extension Officer	District Agri Office, Kavre
64	Mr. Chandra Prasad Risal	Project Head	REED
65	Mr. Dadhi Raj Upreti	President	Potato Trade Association, Kalimati
66	Mr. Devendra Chaudhary	Potato Producer	Mahadev Krishi Sahakari Sanstha, Parasi
67	Mr. Dinesh Prasad Sapkota	Head	Vegetable Crops Development Center, Khumaltar
68	Mr. Gaurav Shrestha	owner	Shrestha Agri Inputs
69	Mr. Gautam Maharjan	owner	NAF Seeds Pvt. Ltd
70	Mr. Gokarna Aryal	Horticulturist	
71	Mr. Hari Kharel	owner	Nepal Tradhost Pvt.ltd
72	Mr. Huma Neupane	owner	Research Director
73	Mr. Jagganath Tiwari	Project Head	FANSEP
74	Mr. Khoj Raj Katwal	Managing Director	Thopa Sinchai
75	Mr. Kiran Acharya	Trader	ANAJ
76	Mr. Krishna Bhakta Shrestha	owner	Chobhar Coldstore & Coldstore Assosisation
77	Mr. Krishna Hari Ghimire	Head	Rastriya Bali Prajanan Tatha Aanubanshik Anusandhan Kendra, Khumaltar
78	Mr. Suraj Baidya	Head	Rastriya Balirog Bigyan Anusandhan Kendra, Khumaltar
79	Mr. Krishna Sharma	Director	Skt Nepal Pvt. Ltd.

S No.	Name	Designation	Organization
80	Mr. Kushendra Bahadur Mahat	Member	National Planning Commission
81	Mr. Mahadev Prasad Poudel	Executive Director	Kalimati Falful Tatha Tarkari Bajar Bikash Samiti
82	Mr. Mahesh Chandra Acharya	Head	Central Agriculture Laboratory
83	Mr. Mahesh Kharel	Mayor	Panchkhal Municipality, Kavrepalanchowk, Nepal.
84	Mr. Matina Joshi Baidhya	Director General	Department of Food Technology and Quality Control
85	Mr. Meghnath Timalsena	Head	Bali Bikash Tatha Krishi Jaibik Bibhidhata Samrachhyan Kendra
86	Mr. Mohan Shrestha	Potato Farmer/Seed Producer	Lisankhupakhar-4, SIndhupalchowk.
87	Mr. Nabaraj Thapa	owner	Kafeldy Cold Store, Panchkhal
88	Mr. Num LaL Kandel	Trader	Potato Seed Storage
89	Mr. Pallavi Singh	Head	Rastriya Beu Bigyan Prabidhi Anusandhan Kendra
90	Mr. Panch Kaji Shresth	Representative	Rastiya Krishak Samhu Mahasang
91	Mr. Prabin Jha	Representative	Swiss Contact
92	Mr. Prakash Gajurel	Secretary	Potato Trade Assocaition
93	Mr. Prakash Kumar Sanjel	Head	Agriculture Information and Training Center
94	Mr. Pravesh Saria	owner	NMS Agro
95	Mr. Puskal Giri	owner	Rasana tractor spare
96	Mr. Rajendra Jung Rayamajhy	Director	Agrivision Hitech Solution Pvt. Ltd.
97	Mr. Rajendra Thapa	Aeroponics and tissue culture potato seed producer	
98	Mr. Rajesh Kunwar	owner	Focus MultiAgro
99	Mr. Ram Nandan Tiwari	Member Secretary	National Farmers' Commission
100	Mr. Ram Sharan Timalshina	Deputy General Manager	Muktinath Krishi Pvt. Ltd.
101	Mr. Resham Babu Amagain	Head	Rastriya Jaibik Prabidhi Anusandhan Kendra
102	Mr. Rita bhandari	Managing Director	Mahi Enterprises
103	Mr. Roshan Prasad Dhakal	owner	Pashupati Agro Traders
104	Mr. Sabitri Baral	Head	Byabasayik Kit Bikash Kendra
105	Mr. Sagar Kafle	Representative	CIMMYT-Nepal
106	Mr. Sakkal Thapa	Director	Sakkal Agro and Seed Pvt.ltd
107	Mr. Sandesh Paudel	Agri- Business Coordinator	King's College
108	Mr. Sangam K.C	Managing Director	Odat Food & Beverage Pvt. Ltd.

S No.	Name	Designation	Organization
109	Mr. Santosh Dahal	Seed Producer	Ficus Biotech Tissue Culture Lab
110	Mr. Santosh Krishna Shrestha	Director	BTL Trade Pvt. Ltd.
111	Mr. Shambhu Krishna Shrestha	owner	BTL Industries
112	Mr. Santosh Kumar Shrestha	owner	Rajdevi Trading
113	Mr. Shri Prasad Bista	Head	Rastriya Mato Bigyan Anusandhan Kendra, Khumaltar
114	Mr. Subhashish Thapaliya	Director	Padmashree Group
115	Mr. Sudeep Regmi	Head	Potato Crop Development Center, Nigale
116	Mr. Tikaram Chapagain	Head	Rastriya Bagbani Anusandhan Kendra, Khumaltar
117	Mr. Tikaram Sharma	Head	Krishi Purbhadhar Bikash Tatha Krishi Yantrikaran Pravardhan Kendra
118	Mr. Umesh Dahal	Director General	Department of Livestock Services
119	Mr. Umesh Shrestha	Agro and Education Entrepreneur	Former State Minister for Education
120	Mr. Kul Prasad Dawadi	owner, Chief Seed Expert	AKC, Kavre District Agri Office, Kavre
121	Mr. Laxman KC	owner	Saptabhumi Krishi
122	Mr. Madan Kandel	Agro Researcher	
123	Mr. Sher Bahadur Bohara	Representative	Oxfam
124	Mr. Shree Krishna Aadikari	Director	Salom Agriculture Pvt.ltd
125	Mr. Subash Mal Jain	owner	Kohinoor Cold Store
126	Mr. Suresh Gurung	Managing Director	Karma Group of Companies
127	Mr. Surya Narayan Shrestha	Farmer	
128	Mr. Tulsyan Ojas	Representative	Kisan Agro Chemicals (P.) Ltd
129	Mr. Upendra Choudhary	owner	Bardibas Cold Store
130	Mr. Yamuna Ghale	Agri Expert	
131	Mr. Yogendra K.C	Agri Expert	
132	Ms. Januka Dahal	Gauradaha Agriculture Campus	Institute of Agriculture and Animal Sciences,
133	Ms. Kanchan Gurung	owner	Feed the Future, Agri Inputs
134	Ms. Sakuntala Subedi	Representative	Nepal China Agriculture Center
135	Ms. Sashi Adhikari	Aeroponics and tissue culture potato seed producer	
136	Ms. Shakuni Rasauli	Chips Producer from Mustang	Federation of Women's Entrepreneurs Association of Nepal
137	Ms. Sudha Sapkota	Head	Rastriya Krishi Niti Anusandhan Kendra
138	Ms. Sunita Nhemaphuki	Chief Executive Officer	R & D Innovative Solutions Pvt. Ltd.